

NASA SP-7039(12)

Section 2

Indexes



NASA PATENT ABSTRACTS BIBLIOGRAPHY

**DE FILE
COPY**

A CONTINUING BIBLIOGRAPHY

Section 2 • Indexes

JANUARY 1978

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

ACCESSION NUMBER RANGES

<i>Bibliography Number</i>	<i>STAR Accession Numbers</i>
NASA SP-7039(04)	N69-20701–N73-33931
NASA SP-7039(12)	N74-10001–N77-34042

NASA

**PATENT
ABSTRACTS
BIBLIOGRAPHY**

A CONTINUING BIBLIOGRAPHY

Section 2 • Indexes

Indexes for the annotated references to NASA-owned inventions covered by U.S. patents and applications for patent that were announced in *Scientific and Technical Aerospace Reports (STAR)* between May 1969 and December 1977 This issue supersedes all previous Index Sections



Scientific and Technical Information Office
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

JANUARY 1978
Washington, D C

This Supplement is available from the National Technical Information Service (NTIS), Springfield, Virginia 22161, at price code E06 (\$10 50 domestic, \$21 00 foreign)

INTRODUCTION

Several thousand inventions result each year from the aeronautical and space research supported by the National Aeronautics and Space Administration. The inventions having important use in government programs or significant commercial potential are usually patented by NASA. These inventions cover practically all fields of technology and include many that have useful and valuable commercial application.

NASA inventions best serve the interests of the United States when their benefits are available to the public. In many instances, the granting of nonexclusive or exclusive licenses for the practice of these inventions may assist in the accomplishment of this objective. This bibliography is published as a service to companies, firms, and individuals seeking new, licensable products for the commercial market.

The *NASA Patent Abstracts Bibliography (NASA PAB)* is a semiannual NASA publication containing comprehensive abstracts and indexes of NASA-owned inventions covered by U.S. patents and applications for patent. The citations included in *NASA PAB* were originally published in NASA's *Scientific and Technical Aerospace Reports (STAR)* and cover *STAR* announcements made since May 1969.

For the convenience of the user, each issue of *NASA PAB* has a separately bound Abstract Section (Section 1) and Index Section (Section 2). Unlike the most recently published issues of *PAB*, the Abstract Section for this issue covers the years 1974 through 1977. To provide a more convenient abstract arrangement, those items originally appearing under the old category scheme were adapted to the revised version which began in 1975. Thus all items will appear in the Abstract Section in numeric sequence under the currently used categories. The Index Section continues to be cumulative, covering all NASA-owned inventions announced in *STAR* since May 1969.

The 1091 citations published in this issue of the Abstract Section cover the period January 1974 through December 1977. The Index Section contains references to the 3292 citations covering the period May 1969 through December 1977.

ABSTRACT SECTION (SECTION 1)

This *PAB* issue incorporates the 1975 *STAR* category revisions which include 10 major subdivisions divided into 74 specific categories and one general category/division. (See Table of Contents for the scope note of each category under which are grouped appropriate NASA inventions.) This new scheme was devised in lieu of the 34 category divisions which were utilized in *PAB* supplements (01) through (06) covering *STAR* abstracts from May 1969 through January 1974. Each entry in the Abstract Section consists of a *STAR* citation accompanied by an abstract and a key illustration taken from the patent or application for patent drawing. Entries are arranged in subject category in order of the ascending NASA Accession Number originally assigned in *STAR* to the invention. The range of NASA Accession Numbers within each issue is printed on the inside front cover.

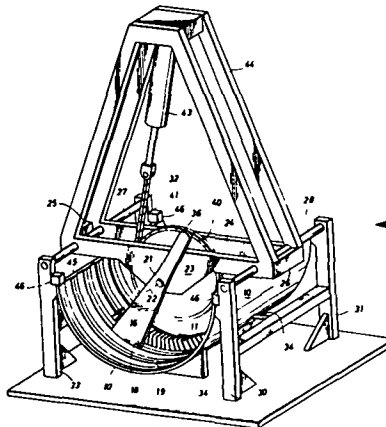
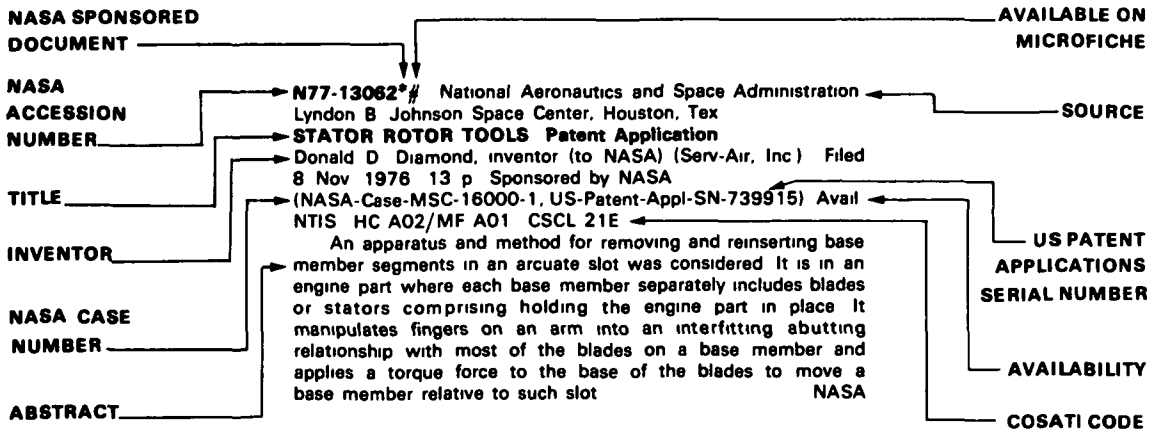
Abstract Citation Data Elements Each of the abstract citations has several data elements useful for identification and indexing purposes, as follows:

- NASA Accession Number
- NASA Case Number
- Inventor's Name

Title of Invention
 U S Patent Application Serial Number
 U S Patent Number (for issued patents only)
 U S Patent Office Classification Number(s)
 (for issued patents only)

These data elements appear in the citation of the abstract as depicted in the Typical Citation and Abstract reproduced below and are also used in the several indexes

TYPICAL CITATION AND ABSTRACT



KEY ILLUSTRATION

INDEX SECTION (SECTION 2)

The Index Section is divided into five indexes which are cross-indexed and are useful in locating a single invention or groups of inventions

Each of the five indexes utilizes basic data elements (1) Subject Category Number, (2) NASA Accession Number, and (3) NASA Case Number, in addition to other specific index terms

Subject Index: Lists all inventions according to appropriate alphabetized technical term and indicates the related NASA Case Number, the Subject Category Number, and the NASA Accession Number

Inventor Index: Lists all inventions according to alphabetized names of inventors and indicates the related NASA Case Number, the Subject Category Number, and the NASA Accession Number

Source Index: Lists all inventions according to alphabetized source of invention (i.e., name of contractor or government installation where invention was made) and indicates the related NASA Case Number, the Subject Category Number, and the NASA Accession Number

Number Index: Lists inventions in order of ascending (1) NASA Case Number, (2) U S Patent Application Serial Number, (3) U S Patent Classification Number, and (4) U S Patent Number and indicates the related Subject Category Number and the NASA Accession Number

Accession Number Index: Lists all inventions in order of ascending NASA Accession Number and indicates the related Subject Category Number, the NASA Case Number, the U S Patent Application Serial Number, the U S Patent Classification Number, and the U S Patent Number

HOW TO USE THIS PUBLICATION TO IDENTIFY NASA INVENTIONS

To identify one or more NASA inventions within a specific technical field or subject, several techniques are possible when using the flexibility incorporated into the *NASA PAB*

(1) *Using Subject Category* To identify all NASA inventions in any one of the subject categories in this issue of *NASA PAB*, select the desired Subject Category in the Abstract Section (Section 1) and find the inventions abstracted thereunder

(2) *Using Subject Index* To identify all NASA inventions listed under a desired technical subject index term, (A) turn to the cumulative Subject Index in the Index Section and find the invention(s) listed under the desired technical subject term (B) Note the indicated Accession Number and the Subject Category Number (C) Using the indicated Accession Number, turn to the inside front cover of the Index Section to determine which issue of the Abstract Section includes the Accession Number desired (D) To find the abstract of the particular invention in the issue of the Abstract Section selected, (i) use the Subject Category Number to locate the Subject Category and (ii) use the Accession Number to locate the desired invention within the Subject Category listing

(3) *Using Patent Classification Index* To identify all inventions covered by issued NASA patents (does not include applications for patent) within a desired Patent Office Classification, (A) turn to the Patent Classification Number in the Number Index of Section 2 and find the associated inventions(s), and (B) follow the instructions outlined in (2)(B), and (D) above

PUBLIC AVAILABILITY OF COPIES OF PATENTS AND PATENT APPLICATIONS

Copies of U S patents may be purchased directly from the U S Patent Office, Washington, D C 20231, for fifty cents a copy When ordering patents, the U S Patent Number should be used, and payment must be remitted in advance, preferably by money order or check payable to the Commissioner of Patents Prepaid purchase coupons for ordering are also available from the Patent Office

NASA patent application specifications are sold in paper copy by the National Technical Information Service at price code A02 (\$4 00 domestic, \$8 00 foreign) Microfiche are sold at price code A01 (\$3 00 domestic, \$4 50 foreign) The US-Patent-Appl-SN-number should be used in ordering either paper copy or microfiche from NTIS

LICENSES FOR COMMERCIAL USE INQUIRIES AND APPLICATIONS FOR LICENSE

NASA inventions, abstracted in *NASA PAB*, are available for nonexclusive or exclusive licensing in accordance with the NASA Patent Licensing Regulations It is significant that all licenses for NASA inventions shall be by express written instruments and that no license will be granted or implied in a NASA invention except as provided in the NASA Patent Licensing Regulations

Inquiries concerning the NASA Patent Licensing Program or the availability of licenses for the commercial use of NASA-owned inventions covered by U S patents or pending applications for patent should be forwarded to the NASA Patent Counsel of the NASA installation having cognizance of the specific invention, or the Assistant General Counsel for Patent Matters, Code GP-4, National Aeronautics and Space Administration, Washington, D C 20546 Inquiries should refer to the NASA Case Number, the Title of the Invention, and the U S Patent Number or the U S Application Serial Number assigned to the invention as shown in *NASA PAB*

The NASA Patent Counsel having cognizance of the invention is determined by the first three letters or prefix of the NASA Case Number assigned to the invention The addresses of NASA Patent Counsels are listed alongside the NASA Case Number prefix letters in the following table Formal application of license must be submitted on the NASA Form, Application for NASA Patent License, which is available upon request from any NASA Patent Counsel

**NASA Case
Number
Prefix Letters**

**Address of Cognizant
NASA Patent Counsel**

ARC-xxxxx
XAR-xxxxx

Ames Research Center
Mail Code 200-11A
Moffett Field, California 94035
Telephone (415)965-5104

ERC-xxxxx
XER-xxxxx
HQN-xxxxx
XHQ-xxxxx

NASA Headquarters
Mail Code GP-4
Washington, D C 20546
Telephone (202)755-3954

GSC-xxxxx
XGS-xxxxx

Goddard Space Flight Center
Mail Code 204
Greenbelt, Maryland 20771
Telephone (301)982-2351

KSC-xxxxx
XKS-xxxxx

John F Kennedy Space Center
Mail Code AA-PAT
Kennedy Space Center, Florida 32899
Telephone (305)867-2544

LAR-xxxxx
XLA-xxxxx

Langley Research Center
Mail Code 456
Langley Station
Hampton, Virginia 23365
Telephone (804)827-3725

LEW-xxxxx
XLE-xxxxx

Lewis Research Center
Mail Code 500-311
21000 Brookpark Road
Cleveland, Ohio 44135
Telephone (216)433-6346

MSC-xxxxx
XMS-xxxxx

Lyndon B Johnson Space Center
Mail Code AM
Houston, Texas 77058
Telephone (713)483-4871

MFS-xxxxx
XMF-xxxxx

George C Marshall Space Flight
Center
Mail Code CC01
Huntsville, Alabama 35812
Telephone (205)453-0020

NPO-xxxxx
XNP-xxxxx
FRC-xxxxx
XFR-xxxxx
WOO-xxxxx

NASA Resident Legal Office
Mail Code 180-601
4800 Oak Grove Drive
Pasadena, California 91103
Telephone (213)354-2700

PATENT LICENSING REGULATIONS

Title 14—AERONAUTICS AND SPACE

Chapter V—National Aeronautics and Space Administration

PART 1245—PATENTS

Subpart 2—Patent Licensing Regulations

1. Subpart 2 is revised in its entirety as follows:

Sec.	
1245.200	Scope of subpart.
1245.201	Definitions.
1245.202	Basic considerations
1245.203	Licenses for practical application of inventions.
1245.204	Other licenses.
1245.205	Publication of NASA inventions available for license.
1245.206	Application for nonexclusive license.
1245.207	Application for exclusive license.
1245.208	Processing applications for license.
1245.209	Royalties and fees.
1245.210	Reports
1245.211	Revocation of licenses.
1245.212	Appeals
1245.213	Litigation.
1245.214	Address of communications.

AUTHORITY The provisions of this Subpart 2 issued under 42 USC 2457, 2473(b)(3).

§ 1245.200 Scope of subpart.

This Subpart 2 prescribes the terms, conditions, and procedures for licensing inventions covered by U.S. patents and patent applications for which the Administrator of the National Aeronautics and Space Administration holds title on behalf of the United States.

§ 1245.201 Definitions.

For the purpose of this subpart, the following definitions apply:

(a) "Invention" means an invention covered by a U.S. patent or patent application for which the Administrator of NASA holds title on behalf of the United States and which is designated by the Administration as appropriate for the grant of license(s) in accordance with this subpart.

(b) "To practice an invention" means to make or have made, use or have used, sell or have sold, or otherwise dispose of according to law any machine, article of manufacture or composition of matter physically embodying the invention, or to use or have used the process or method comprising the invention.

(c) "Practical application" means the manufacture in the case of a composition of matter or product, the use in the case of a process, or the operation in the case of a machine, under such conditions as to establish that the invention is being utilized and that its benefits are reasonably accessible to the public.

(d) "Special invention" means any invention designated by the NASA Assistant General Counsel for Patent Matters to be subject to short-form licensing procedures. An invention may be designated as a special invention when a determination is made that:

(1) Practical application has occurred and is likely to continue for the life of

the patent and for which an exclusive license is not in force, or

(2) The public interest would be served by the expeditious granting of a nonexclusive license for practice of the invention by the public.

(e) The "Administrator" means the Administrator of the National Aeronautics and Space Administration, or his designee.

(f) "Government" means the Government of the United States of America.

(g) The "Inventions and Contributions Board" means the NASA Inventions and Contributions Board established by the Administrator of NASA within the Administration in accordance with section 305 of the National Aeronautics and Space Act of 1958 as amended (42 USC 2457)

§ 1245.202 Basic considerations.

(a) Much of the new technology resulting from NASA sponsored research and development in aeronautical and space activities has application in other fields. NASA has special authority and responsibility under the National Aeronautics and Space Act of 1958, as amended (42 USC 2451), to provide for the widest practical dissemination and utilization of this new technology. In addition, NASA has been given unique requirements to protect the inventions resulting from NASA activities and to promulgate licensing regulations to encourage commercial use of these inventions.

(b) NASA-owned inventions will best serve the interests of the United States when they are brought to practical application in the shortest time possible. Although NASA encourages the non-exclusive licensing of its inventions to promote competition and achieve their widest possible utilization, the commercial development of certain inventions calls for a substantial capital investment which private manufacturers may be unwilling to risk under a nonexclusive license. It is the policy of NASA to seek exclusive licenses when such licenses will provide the necessary incentive to the licensee to achieve early practical application of the invention.

(c) The Administrator, in determining whether to grant an exclusive license, will evaluate all relevant information submitted by applicants and all other persons and will consider the necessity for further technical and market development of the invention, the capabilities of prospective licensees, their proposed plans to undertake the required investment and development, the impact on competitors, and the benefits of the license to the Government and to the public. Preference for exclusive license shall be given to U.S. citizens or companies who intend to manufacture or use, in the case of a process, the invention in the United States of America, its territories and possessions. Consideration may also be given to assisting small businesses and minority business enterprises, as well as economically depressed, low income and labor surplus areas.

(d) All licenses for inventions shall

be by express written instruments. No license shall be granted either expressly or by implication, for a NASA invention except as provided for in §§ 1245.203 and 1245.204 and in any existing or future treaty or agreement between the United States and any foreign government.

(e) Licenses for inventions covered by NASA-owned foreign patents and patent applications shall be granted in accordance with the NASA Foreign Patent Licensing Regulations (§ 1245.4).

§ 1245.203 Licenses for practical application of inventions.

(a) *General* As an incentive to encourage practical application of inventions, licenses will be granted to responsible applicants according to the circumstances and conditions set forth in this section.

(b) *Nonexclusive licenses* (1) Each invention will be made available to responsible applicants for nonexclusive, revocable licensing in accordance with § 1245.206, consistent with the provisions of any existing exclusive license.

(2) The duration of the license shall be for a period as specified in the license.

(3) The license shall require the licensee to achieve the practical application of the invention and to then practice the invention for the duration of the license.

(4) The license may be granted for all or less than all fields of use of the invention and throughout the United States of America, its territories and possessions, Puerto Rico, and the District of Columbia, or in any lesser geographic portion thereof.

(5) The license shall extend to the subsidiaries and affiliates of the licensee and shall be nonassignable without approval of the Administrator, NASA, except to the successor of that part of the licensee's business to which the invention pertains.

(c) *Short-form nonexclusive licenses.* A nonexclusive, revocable license for a special invention, as defined in § 1245.201 (d), shall be granted upon written request, to any applicant by the Patent Counsel of the NASA installation having cognizance of the invention.

(d) *Exclusive licenses.* (1) A limited exclusive license may be granted on an invention available for such licensing provided that:

(i) The Administrator has determined that: (a) The invention has not been brought to practical application by a nonexclusive licensee in the fields of use or in the geographical locations covered by the application for the exclusive license, (b) practical application of the invention in the fields of use or geographical locations covered by the application for the exclusive license is not likely to be achieved expeditiously by the further funding of the invention by the Government or under a nonexclusive license requested by any applicant pursuant to these regulations, and (c) the exclusive license will provide the necessary incentive to the licensee to achieve the practical application of the invention; and

(ii) Either a notice pursuant to

PATENT LICENSING REGULATIONS

§ 1245.205 listing the invention as available for licensing has been published in the FEDERAL REGISTER for at least 9 months, or a patent covering the invention has been issued for at least 6 months. However, a limited exclusive license may be granted prior to the periods specified above if the Administrator determines that the public interest will best be served by the earlier grant of an exclusive license.

(2) The license may be granted for all or less than all fields of use of the invention, and throughout the United States of America, its territories and possessions, Puerto Rico, and the District of Columbia, or in any lesser geographic portion thereof.

(3) The exclusive period of the license shall be negotiated, but shall be for less than the terminal portion of the patent, and shall be related to the period necessary to provide a reasonable incentive to invest the necessary risk capital.

(4) The license shall require the licensee to practice the invention within a period specified in the license and then to achieve practical application of the invention.

(5) The license shall require the licensee to expend a specified minimum sum of money and/or to take other specified actions, within indicated period(s) after the effective date of the license, in an effort to achieve practical application of the invention.

(6) The license shall be subject to at least an irrevocable royalty-free right of the Government of the United States to practice and have practiced the invention throughout the world by or on behalf of the Government of the United States and on behalf of any foreign government pursuant to any existing or future treaty or agreement with the United States.

(7) The license may reserve to the Administrator, NASA, under the following circumstances, the right to require the granting of a sublicense to responsible applicant(s) on terms that are considered reasonable by the Administrator, taking into consideration the current royalty rates under similar patents and other pertinent facts: (i) To the extent that the invention is required for public use by Government regulation, or (ii) as may be necessary to fulfill health or safety needs, or (iii) for other purposes stipulated in the license.

(8) The license shall be nontransferable except to the successor of that part of the licensee's business to which the invention pertains.

(9) Subject to the approval of the Administrator, the licensee may grant sublicenses under the license. Each sublicense granted by an exclusive licensee shall make reference to and shall provide that the sublicense is subject to the terms of the exclusive license including the rights retained by the Government under the exclusive license. A copy of each sublicense shall be furnished to the Administrator.

(10) The license may be subject to such other reservations as may be in the public interest.

§ 1245.204 Other licenses.

(a) *License to contractor.* There is

hereby granted to the contractor reporting an invention made in the performance of work under a contract of NASA in the manner specified in section 305(a)

(1) or (2) of the National Aeronautics and Space Act of 1958 as amended (42 U.S.C. 2457(a) (1) or (2)), a revocable, nonexclusive, royalty-free license for the practice of such invention, together with the right to grant sublicenses of the same scope to the extent the contractor was legally obligated to do so at the time the contract was awarded. Such license and right is nontransferable except to the successor of that part of the contractor's business to which the invention pertains.

(b) *Miscellaneous licenses.* Subject to any outstanding licenses, nothing in this subpart 2 shall preclude the Administrator from granting other licenses for inventions, when he determines that do so would provide for an equitable distribution of rights. The following exemplify circumstances wherein such licenses may be granted:

(1) In consideration of the settlement of an interference;

(2) In consideration of a release of a claim of infringement; or

(3) In exchange for or as part of the consideration for a license under adversely held patent(s).

§ 1245.205 Publication of NASA inventions available for license.

(a) A notice will be periodically published in the FEDERAL REGISTER listing inventions available for licensing. Abstracts of the inventions will also be published in the NASA Scientific and Technical Aerospace Reports (STAR) and other NASA publications.

(b) Copies of pending patent applications for inventions abstracted in STAR may be purchased from the National Technical Information Service, Springfield, Va. 22151.

§ 1245.206 Application for nonexclusive license.

(a) *Submission of application.* An application for nonexclusive license under § 1245.203(b) or a short-form nonexclusive license for special inventions under § 1245.203(c) shall be addressed to the NASA Patent Counsel of the NASA installation having cognizance over the NASA invention for which a license is desired or to the NASA Assistant General Counsel for Patent Matters.

(b) *Contents of an application for nonexclusive license.* An application for nonexclusive license under § 1245.203(b) shall include:

(1) Identification of invention for which license is desired, including the NASA patent case number, patent application serial number of patent number, title and date, if known;

(2) Name and address of the person, company or organization applying for license and whether the applicant is a U.S. citizen or a U.S. corporation;

(3) Name and address of representative of applicant to whom correspondence should be sent;

(4) Nature and type of applicant's business;

(5) Number of employees;

(6) Purpose for which license is desired;

(7) A statement that contains the applicant's best knowledge of the extent to which the invention is being practiced by private industry and the Government;

(8) A description of applicant's capability and plan to undertake the development and marketing required to achieve the practical application of the invention, including the geographical location where the applicant plans to manufacture or use, in the case of a process, the invention; and

(9) A statement indicating the minimum term of years the applicant desires to be licensed.

(c) *Contents of an application for a short-form nonexclusive license.* An application for a short-form nonexclusive license under § 1245.203(c) for a special invention shall include:

(1) Identification of invention for which license is desired, including the NASA patent case number, patent application serial number or patent number, title and date, if known;

(2) Name and address of company or organization applying for license; and

(3) Name and address of representative of applicant to whom correspondence should be sent.

§ 1245.207 Application for exclusive license.

(a) *Submission of application.* An application for exclusive license under § 1245.203(d) may be submitted to NASA at any time. An application for exclusive license shall be addressed to the NASA Assistant General Counsel for Patent Matters.

(b) *Contents of an application for exclusive license.* In addition to the requirements set forth in § 1245.206(b), the application for an exclusive license shall include:

(1) Applicant's status, if any, in any one or more of the following categories:

(i) Small business firm;

(ii) Minority business enterprise;

(iii) Location in a surplus labor area;

(iv) Location in a low-income urban area; and

(v) Location in an area designated by the Government as economically depressed.

(2) A statement indicating the time, expenditure, and other acts which the applicant considers necessary to achieve practical application of the invention, and the applicant's offer to invest that sum and to perform such acts if the license is granted.

(3) A statement whether the applicant would be willing to accept a license for all or less than all fields of use of the invention throughout the United States of America, its territories and possessions, Puerto Rico, and the District of Columbia, or in any lesser geographic portion thereof.

(4) A statement indicating the amount of royalty fees or other consideration, if any, the applicant would be willing to pay the Government for the exclusive license; and

(5) Any other facts which the applicant believes to show it to be in the interests of the United States of America for the Administrator to grant an exclusive license rather than a nonexclusive li-

PATENT LICENSING REGULATIONS

cense and that such an exclusive license should be granted to the applicant

§ 1245.208 Processing applications for license.

(a) *Initial review* Applications for nonexclusive and exclusive licenses under §§ 1245.206 and 1245.207 will be reviewed by the Patent Counsel of the NASA Installation having cognizance for the invention and the NASA Assistant General Counsel for Patent Matters, to determine the conformity and appropriateness of the application for license and the availability of the specific invention for the license requested. The Assistant General Counsel for Patent Matters will forward all applications for license conforming to §§ 1245.206(b) and 1245.207(b) to the NASA Inventions and Contributions Board when the invention is available for consideration of the requested license. Prior to forwarding applications for exclusive licenses to the Inventions and Contributions Board, notice in writing will be given to each nonexclusive licensee for the specific invention advising of the receipt of the application for the exclusive license and providing each nonexclusive licensee with a 30-day period for submitting either evidence that practical application of the invention has occurred or is about to occur or, an application for an exclusive license for the invention.

(b) *Recommendations of Inventions and Contributions Board.* The Inventions and Contributions Board shall, in accordance with the basic considerations set forth in §§ 1245.202 and 1245.203, evaluate all applications for license forwarded by the Assistant General Counsel for Patent Matters. Based upon the facts presented to the Inventions and Contributions Board in the application and any other facts in its possession, the Inventions and Contributions Board shall recommend to the Administrator: (1) Whether a nonexclusive or exclusive license should be granted, (2) the identity of the licensee, and (3) any special terms or conditions of the license.

(c) *Determination of Administrator and grant of nonexclusive licenses.* The Administrator shall review the recommendations of the Inventions and Contributions Board and shall determine whether to grant the nonexclusive license as recommended by the Board. If the Administrator determines to grant the license, the license will be granted upon the negotiation of the appropriate terms and conditions of the Office of General Counsel.

(d) *Determination of Administrator and grant of exclusive licenses—(1) Notice.* If the Administrator determines that the best interest of the United States will be served by the granting of an exclusive license in accordance with the basic considerations set forth in §§ 1245.202 and 1245.203, a notice shall be published in the FEDERAL REGISTER announcing the intent to grant the exclusive license, the identification of the invention, special terms or conditions of the proposed license, and a statement that NASA will grant the exclusive license unless within 30 days of the publication of such notice the Inventions and Contributions Board receives in writing

any of the following together with supporting documentation:

(i) A statement from any person setting forth reasons why it would not be in the best interest of the United States to grant the proposed exclusive license, or

(ii) An application for a nonexclusive license under such invention, in accordance with § 1245.206(b), in which applicant states that he has already brought or is likely to bring the invention to practical application within a reasonable period.

The Inventions and Contributions Board shall, upon receipt of a written request within the 30 days' notice period, grant an extension of 30 days for the submission of the documents designated above

(2) *Recommendation of Inventions and Contributions Board.* Upon the expiration of the period required by subparagraph (1) of this paragraph, the Board shall review all written responses to the notice and shall then recommend to the Administrator whether to grant the exclusive license as the Board initially recommended or whether a different form of license, if any, should instead be granted

(3) *Grant of exclusive licenses.* The Administrator shall review the Board's recommendation and shall determine if the interest of the United States would best be served by the grant of an exclusive license as recommended by the Board. If the Administrator determines to grant the exclusive license, the license will be granted upon the negotiation of the appropriate terms and conditions by the Office of General Counsel.

§ 1245.209 Royalties and fees.

(a) Normally, a nonexclusive license for the practical application of an invention granted to a U.S. citizen or company will not require the payment of royalties; however, NASA may require other consideration.

(b) An exclusive license for an invention may require the payment of royalties, fees or other consideration when the licensing circumstances and the basic considerations in § 1245.202, considered together, indicate that it is in the public interest to do so.

§ 1245.210 Reports.

A license shall require the licensee to submit periodic reports of his efforts to work the invention. The reports shall contain information within his knowledge, or which he may acquire under normal business practice, pertaining to the commercial use that is being made of the invention and such other information which the Administrator may determine pertinent to the licensing program and which is specified in the license.

§ 1245.211 Revocation of licenses.

(a) Any license granted pursuant to § 1245.203 may be revoked, either in part or in its entirety, by the Administrator if in his opinion the licensee at any time shall fail to use adequate efforts to bring to or achieve practical application of the invention in accordance with the terms of the license, or if the licensee at any

time shall default in making any report required by the license, or shall make any false report, or shall commit any breach of any covenant or agreement therein contained, and shall fail to remedy any such default, false report, or breach within 30 days after written notice, or if the patent is deemed unenforceable either by the Attorney General or a final decision of a U.S. court.

(b) Any license granted pursuant to § 1245.204(a) may be revoked, either in part or in its entirety, by the Administrator if in his opinion such revocation is necessary to achieve the earliest practical application of the invention pursuant to an application for exclusive license submitted in accordance with § 1245.207, or the licensee at any time shall breach any covenant or agreement contained in the license, and shall fail to remedy any such breach within 30 days after written notice thereof.

(c) Before revoking any license granted pursuant to this Subpart 2 for any cause, there will be furnished to the licensee a written notice of intention to revoke the license, and the licensee will be allowed 30 days after such notice in which to appeal and request a hearing before the Inventions and Contributions Board on the question of revocation. After a hearing, the Inventions and Contributions Board shall transmit to the Administrator the record of proceedings, its findings of fact, and its recommendation whether the license should be revoked either in part or in its entirety. The Administrator shall review the recommendation of the Board and determine whether to revoke the license in part or in its entirety. Revocation of a license shall include revocation of all sublicenses which have been granted.

§ 1245.212 Appeals.

Any person desiring to file an appeal pursuant to § 1245.211(c) shall address the appeal to Chairman, Inventions and Contributions Board. Any person filing an appeal shall be afforded an opportunity to be heard before the Inventions and Contributions Board, and to offer evidence in support of his appeal. The procedures to be followed in any such matter shall be determined by the Administrator. The Board shall make findings of fact and recommendations with respect to disposition of the appeal. The decision on the appeal shall be made by the Administrator, and such decision shall be final and conclusive, except on questions of law, unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence.

§ 1245.213 Litigation.

An exclusive licensee shall be granted the right to sue at his own expense any party who infringes the rights set forth in his license and covered by the licensed patent. The licensee may join the Government, upon consent of the Attorney General, as a party complainant in such suit, but without expense to the Government and the licensee shall pay costs and any final judgment or decree that may be rendered against the Govern-

PATENT LICENSING REGULATIONS

ment in such suit. The Government shall also have an absolute right to intervene in any such suit at its own expense. The licensee shall be obligated to promptly furnish to the Government, upon request, copies of all pleadings and other papers filed in any such suit and of evidence adduced in proceedings relating to the licensed patent including, but not limited to, negotiations for settlement and agreements settling claims by a licensee based on the licensed patent, and all other books, documents, papers, and

records pertaining to such suit. If, as a result of any such litigation the patent shall be declared invalid, the licensee shall have the right to surrender his license and be relieved from any further obligation thereunder.

§ 1245.214 Address of communications.

(a) Communications to the Assistant General Counsel for Patent Matters in accordance with §§ 1245.206 and 1245.207 and requests for information concerning licenses for NASA inventions should be

addressed to the Assistant General Counsel for Patent Matters, Code GP, National Aeronautics and Space Administration, Washington, D C 20546.

(b) Communications to the Inventions and Contributions Board in accordance with §§ 1245.208, 1245.211, and 1245.212 should be addressed to Chairman, Inventions and Contributions Board, National Aeronautics and Space Administration, Washington, D C 20546.

Effective date. The regulations set forth in this subpart 2 are effective April 1, 1972.

JAMES C FLETCHER,
Administrator.

FOREIGN PATENT LICENSING REGULATIONS

Selected NASA inventions are also available for licensing in countries other than the United States in accordance with the NASA Foreign Patent Licensing Regulation (14 C.F.R. 1245.4), a copy of which is available from any NASA Patent Counsel. For abstracts of NASA-owned inventions available for licensing in countries other than the United States, see NASA SP-7038, "Significant NASA Inventions Available for Licensing in Countries Other Than the United States." A copy of this NASA publication is available from NASA Headquarters, Code GP-4, Washington, D C, 20546.

Subject Categories

(1969 – 1973)

01 Aerodynamics

Includes aerodynamics of bodies, combinations, internal flow in ducts and turbomachinery, wings, rotors, and control surfaces For applications see 02 Aircraft and 32 Space Vehicles For related information see also 12 Fluid Mechanics, and 33 Thermodynamics and Combustion

02 Aircraft

Includes fixed-wing airplanes, helicopters, gliders, balloons, ornithopters, etc. and specific types of complete aircraft (e.g., ground effect machines, STOL, and VTOL), flight tests, operating problems (e.g., sonic boom), safety and safety devices, economics, and stability and control For basic research see 01 Aerodynamics For related information see also 31 Space Vehicles, and 32 Structural Mechanics

03 Auxiliary Systems

Includes fuel cells, energy conversion cells, and solar cells, auxiliary gas turbines, hydraulic, pneumatic and electrical systems, actuators, and inverters For related information see also 09 Electronic Equipment, 22 Nuclear Engineering, and 28 Propulsion Systems

04 Biosciences

Includes aerospace medicine, exobiology, radiation effects on biological systems, physiological and psychological factors For related information see also 05 Biotechnology

05 Biotechnology

Includes life support systems, human engineering, protective clothing and equipment, crew training and evaluation, and piloting For related information see also 04 Biosciences

06 Chemistry

Includes chemical analysis and identification (e.g., spectroscopy) For applications see 17 Materials, Metallic, 18 Materials, Nonmetallic, and 27 Propellants

07 Communications

Includes communications equipment and techniques, noise, radio and communications blackout, modulation telemetry, tracking radar and optical observation, and wave propagation For basic research see 23 Physics, General, and 21 Navigation

08 Computers

Includes computer operation and programming, and data processing For applications, see specific categories For related information see also 19 Mathematics

09 Electronic Equipment

Includes electronic test equipment and maintainability, component parts, e.g., electron tubes, tunnel diodes, transistors, integrated circuitry, microminiaturization For basic research see 10 Electronics For related information see also 07 Communications and 21 Navigation

10 Electronics

Includes circuit theory, and feedback and control theory For applications see 09 Electronic Equipment For related information see specific Physics categories

11 Facilities, Research and Support

Includes airports, lunar and planetary bases including associated vehicles, ground support systems, related logistics, simulators, test facilities (e.g., rocket engine test stands, shock tubes, and wind tunnels), test ranges, and tracking stations

12 Fluid Mechanics

Includes boundary-layer flow, compressible flow, gas dynamics, hydrodynamics, and turbulence For related information see also 01 Aerodynamics, and 33 Thermodynamics and Combustion

13 Geophysics

Includes aeronomy, upper and lower atmosphere studies, oceanography, cartography, and geodesy For related information see also 20 Meteorology, 29 Space Radiation, and 30 Space Sciences

14 Instrumentation and Photography

Includes design, installation, and testing of instrumentation systems, gyroscopes, measuring instruments and gages, recorders, transducers, aerial photography, and telescopes and cameras

15 Machine Elements and Processes

Includes bearings, seals, pumps, and other mechanical equipment, lubrication, friction, and wear, manufacturing processes and quality control, reliability, drafting, and materials fabrication, handling, and inspection

16 Masers

Includes applications of masers and lasers For basic research see 26 Physics, Solid-State

17 Materials, Metallic

Includes cermets, corrosion, physical and mechanical properties of materials, metallurgy, and applications as structural materials For basic research see 06 Chemistry For related information see also 18 Materials, Nonmetallic, and 32 Structural Mechanics

18 Materials, Nonmetallic

Includes corrosion, physical and mechanical properties of materials (e.g., plastics), and elastomers hydraulic fluids, etc For basic research see 06 Chemistry For related information see also 17 Materials, Metallic, 27 Propellants, and 32 Structural Mechanics

19 Mathematics

Includes calculation methods and theory, and numerical analysis For applications see specific categories For related information see also 08 Computers

20 Meteorology

Includes climatology, weather forecasting, and visibility studies For related information see also 13 Geophysics, and 30 Space Sciences

21 Navigation

Includes guidance, autopilots, star and planet tracking, inertial platforms, and air traffic control For related information see also 07 Communications

22 Nuclear Engineering

Includes nuclear reactors and nuclear heat sources used for propulsion and auxiliary power For basic research see 24 Physics, Atomic, Molecular, and Nuclear For related information see also 03 Auxiliary Systems, and 28 Propulsion Systems

23 Physics, General

Includes acoustics, cryogenics, mechanics, and optics For astrophysics see 30 Space Sciences For geophysics and related information see also 13 Geophysics, 20 Meteorology, and 29 Space Radiation

24 Physics, Atomic, Molecular, and Nuclear

Includes atomic, molecular and nuclear physics For applications see 22 Nuclear Engineering For related information see also 29 Space Radiation

25 Physics, Plasma

Includes magnetohydrodynamics For applications see 28 Propulsion Systems

26 Physics, Solid-State

Includes semiconductor theory, and superconductivity For applications see 16 Masers For related information see also 10 Electronics

27 Propellants

Includes fuels, igniters, and oxidizers For basic re-

search see 06 Chemistry, and 33 Thermodynamics and Combustion For related information see also 28 Propulsion Systems

28 Propulsion Systems

Includes air breathing, electric, liquid, solid, and magnetohydrodynamic propulsion For nuclear propulsion see 22 Nuclear Engineering For basic research see 23 Physics, General, and 33 Thermodynamics and Combustion For applications see 31 Space Vehicles For related information see also 27 Propellants

29 Space Radiation

Includes cosmic radiation, solar flares, solar radiation, and Van Allen radiation belts For related information see also 13 Geophysics, and 24 Physics, Atomic, Molecular, and Nuclear

30 Space Sciences

Includes astronomy and astrophysics, cosmology, lunar and planetary flight and exploration, and theoretical analysis of orbits and trajectories For related information see also 11 Facilities, Research and Support, and 31 Space Vehicles

31 Space Vehicles

Includes launch vehicles, manned space capsules, clustered and multistage rockets, satellites, sounding rockets and probes, and operating problems For basic research see 30 Space Sciences For related information see also 28 Propulsion Systems, and 32 Structural Mechanics

32 Structural Mechanics

Includes structural element design and weight analysis, fatigue, thermal stress, impact phenomena, vibration, flutter, inflatable structures, and structural tests For related information see also 17 Materials, Metallic, and 18 Materials, Nonmetallic

33 Thermodynamics and Combustion

Includes ablation, cooling, heating, heat transfer, thermal balance, and other thermal effects, and combustion theory For related information see also 12 Fluid Mechanics, and 27 Propellants

34 General

Includes information of a broad nature related to industrial applications and technology, and to basic research, defense aspects, information retrieval, management, law and related legal matters, and legislative hearings and documents

TABLE OF CONTENTS

Section 1 • Abstracts

Subject Categories (1974 -)

AERONAUTICS

Includes aeronautics (general), aerodynamics, air transportation and safety, aircraft communications and navigation, aircraft design, testing and performance, aircraft instrumentation, aircraft propulsion and power, aircraft stability and control, and research and support facilities (air)

For related information see also *Astronautics*

01 AERONAUTICS (GENERAL)

02 AERODYNAMICS

Includes aerodynamics of bodies, combinations, wings, rotors, and control surfaces, and internal flow in ducts and turbomachinery

For related information see also *34 Fluid Mechanics and Heat Transfer*

03 AIR TRANSPORTATION AND SAFETY

Includes passenger and cargo air transport operations, and aircraft accidents

For related information see also *16 Space Transportation* and *85 Urban Technology and Transportation*

04 AIRCRAFT COMMUNICATIONS AND NAVIGATION

Includes digital and voice communication with aircraft, air navigation systems (satellite and ground based), and air traffic control

For related information see also *17 Spacecraft Communications, Command and Tracking* and *32 Communications*

05 AIRCRAFT DESIGN, TESTING AND PERFORMANCE

Includes aircraft simulation technology

For related information see also *18 Spacecraft Design, Testing and Performance* and *39 Structural Mechanics*

06 AIRCRAFT INSTRUMENTATION

Includes cockpit and cabin display devices, and flight instruments

For related information see also *19 Spacecraft Instrumentation* and *35 Instrumentation and Photography*

07 AIRCRAFT PROPULSION AND POWER

Includes prime propulsion systems and systems components, e g , gas turbine engines and compressors, and on-board auxiliary power plants for aircraft

For related information see also *20 Spacecraft Propulsion and Power*, *28 Propellants and Fuels*, and *44 Energy Production and Conversion*

08 AIRCRAFT STABILITY AND CONTROL

Includes aircraft handling qualities, piloting, flight controls, and autopilots

09 RESEARCH AND SUPPORT FACILITIES (AIR)

Includes airports, hangars and runways, aircraft repair and overhaul facilities, wind tunnels, shock tube facilities, and engine test blocks

For related information see also *14 Ground Support Systems and Facilities (Space)*

ASTRONAUTICS

Includes astronautics (general), astrodynamics, ground support systems and facilities (space), launch vehicles and space vehicles, space transportation, spacecraft communications, command and tracking, spacecraft design, testing and performance, spacecraft instrumentation, and spacecraft propulsion and power

For related information see also *Aeronautics*

12 ASTRONAUTICS (GENERAL)

For extraterrestrial exploration see *91 Lunar and Planetary Exploration*

13 ASTRODYNAMICS

Includes powered and free-flight trajectories, and orbit and launching dynamics

14 GROUND SUPPORT SYSTEMS AND FACILITIES (SPACE)

Includes launch complexes, research and production facilities, ground support equipment, e g , mobile transporters, and simulators

For related information see also *09 Research and Support Facilities (Air)*

15 LAUNCH VEHICLES AND SPACE VEHICLES

Includes boosters, manned orbital laboratories, reusable vehicles, and space stations

16 SPACE TRANSPORTATION

Includes passenger and cargo space transportation, e g , shuttle operations, and rescue techniques

For related information see also *03 Air Transportation and Safety* and *85 Urban Technology and Transportation*

17 SPACECRAFT COMMUNICATIONS, COMMAND AND TRACKING

Includes telemetry, space communications networks, astronavigation, and radio blackout

For related information see also *04 Aircraft Communications and Navigation* and *32 Communications*

18 SPACECRAFT DESIGN, TESTING AND PERFORMANCE

Includes spacecraft thermal and environmental control, and attitude control

For life support systems see *54 Man/System Technology and Life Support* For related information see also *05 Aircraft Design, Testing and Performance* and *39 Structural Mechanics*

19 SPACECRAFT INSTRUMENTATION

For related information see also *06 Aircraft Instrumentation* and *35 Instrumentation and Photography*

20 SPACECRAFT PROPULSION AND POWER

Includes main propulsion systems and components, e.g., rocket engines, and spacecraft auxiliary power sources

For related information see also *07 Aircraft Propulsion and Power*, *28 Propellants and Fuels*, and *44 Energy Production and Conversion*

CHEMISTRY AND MATERIALS

Includes chemistry and materials (general), composite materials, inorganic and physical chemistry, metallic materials, nonmetallic materials, and propellants and fuels

23 CHEMISTRY AND MATERIALS (GENERAL)

Includes biochemistry and organic chemistry

24 COMPOSITE MATERIALS

Includes laminates

25 INORGANIC AND PHYSICAL CHEMISTRY

Includes chemical analysis, e.g., chromatography, combustion theory, electrochemistry, and photochemistry

For related information see also *77 Thermodynamics and Statistical Physics*

26 METALLIC MATERIALS

Includes physical, chemical, and mechanical properties of metals, e.g., corrosion, and metallurgy

27 NONMETALLIC MATERIALS

Includes physical, chemical, and mechanical properties of plastics, elastomers, lubricants, polymers, textiles, adhesives, and ceramic materials

28 PROPELLANTS AND FUELS

Includes rocket propellants, igniters, and oxidizers, storage and handling, and aircraft fuels

For related information see also *07 Aircraft Propulsion and Power*, *20 Spacecraft Propulsion and Power*, and *44 Energy Production and Conversion*

ENGINEERING

Includes engineering (general), communications, electronics and electrical engineering, fluid mechanics and heat transfer, instrumentation and photography, lasers and masers, mechanical engineering, quality assurance and reliability, and structural mechanics

For related information see also *Physics*

31 ENGINEERING (GENERAL)

Includes vacuum technology, control engineering, display engineering, and cryogenics

32 COMMUNICATIONS

Includes land and global communications, communications theory, and optical communications

For related information see also *04 Aircraft Communications and Navigation* and *17 Spacecraft Communications, Command and Tracking*

33 ELECTRONICS AND ELECTRICAL ENGINEERING

Includes test equipment and maintainability, components, e.g., tunnel diodes and transistors, microminiaturization, and integrated circuitry

For related information see also *60 Computer Operations and Hardware* and *76 Solid-State Physics*

34 FLUID MECHANICS AND HEAT TRANSFER

Includes boundary layers, hydrodynamics, fluidics, mass transfer, and ablation cooling

For related information see also *02 Aerodynamics* and *77 Thermodynamics and Statistical Physics*

35 INSTRUMENTATION AND PHOTOGRAPHY

Includes remote sensors, measuring instruments and gages, detectors, cameras and photographic supplies, and holography

For aerial photography see *43 Earth Resources*
For related information see also *06 Aircraft Instrumentation* and *19 Spacecraft Instrumentation*

36 LASERS AND MASERS

Includes parametric amplifiers

37 MECHANICAL ENGINEERING

Includes auxiliary systems (non-power), machine elements and processes, and mechanical equipment

38 QUALITY ASSURANCE AND RELIABILITY

Includes product sampling procedures and techniques, and quality control

39 STRUCTURAL MECHANICS

Includes structural element design and weight analysis, fatigue, and thermal stress

For applications see *05 Aircraft Design, Testing and Performance* and *18 Spacecraft Design, Testing and Performance*

GEOSCIENCES

Includes geosciences (general), earth resources, energy production and conversion, environment pollution, geophysics, meteorology and climatology, and oceanography

For related information see also *Space Sciences*

42 GEOSCIENCES (GENERAL)

43 EARTH RESOURCES

Includes remote sensing of earth resources by aircraft and spacecraft, photogrammetry, and aerial photography

For instrumentation see *35 Instrumentation and Photography*

44 ENERGY PRODUCTION AND CONVERSION

Includes specific energy conversion systems, e.g., fuel cells and batteries, global sources of energy, fossil fuels, geophysical conversion, hydroelectric power, and wind power

For related information see also *07 Aircraft Propulsion and Power*, *20 Spacecraft Propulsion and Power*, *28 Propellants and Fuels*, and *85 Urban Technology and Transportation*

45 ENVIRONMENT POLLUTION

Includes air, noise, thermal and water pollution, environment monitoring, and contamination control

46 GEOPHYSICS

Includes aeronomy, upper and lower atmosphere studies, ionospheric and magnetospheric physics, and geomagnetism

For space radiation see *93 Space Radiation*

47 METEOROLOGY AND CLIMATOLOGY

Includes weather forecasting and modification

48 OCEANOGRAPHY

Includes biological, dynamic and physical oceanography, and marine resources

LIFE SCIENCES

Includes life sciences (general), aerospace medicine, behavioral sciences, man/system technology and life support, and planetary biology

51 LIFE SCIENCES (GENERAL)

Includes genetics

52 AEROSPACE MEDICINE

Includes physiological factors, biological effects of radiation, and weightlessness

53 BEHAVIORAL SCIENCES

Includes psychological factors, individual and group behavior, crew training and evaluation, and psychiatric research

54 MAN/SYSTEM TECHNOLOGY AND LIFE SUPPORT

Includes human engineering, biotechnology, and space suits and protective clothing

55 PLANETARY BIOLOGY

Includes exobiology, and extraterrestrial life

MATHEMATICAL AND COMPUTER SCIENCES

Includes mathematical and computer sciences (general), computer operations and hardware, computer programming and software, computer systems, cybernetics, numerical analysis, statistics and probability, systems analysis, and theoretical mathematics

59 MATHEMATICAL AND COMPUTER SCIENCES (GENERAL)

60 COMPUTER OPERATIONS AND HARDWARE

Includes computer graphics and data processing
For components see *33 Electronics and Electrical Engineering*

61 COMPUTER PROGRAMMING AND SOFTWARE

Includes computer programs, routines, and algorithms

62 COMPUTER SYSTEMS

Includes computer networks

63 CYBERNETICS

Includes feedback and control theory
For related information see also *54 Man/System Technology and Life Support*

64 NUMERICAL ANALYSIS

Includes iteration, difference equations, and numerical approximation

65 STATISTICS AND PROBABILITY

Includes data sampling and smoothing, Monte Carlo method, and stochastic processes

66 SYSTEMS ANALYSIS

Includes mathematical modeling, network analysis, and operations research

67 THEORETICAL MATHEMATICS

Includes topology and number theory

PHYSICS

Includes physics (general), acoustics, atomic and molecular physics, nuclear and high-energy physics, optics, plasma physics, solid-state physics, and thermodynamics and statistical physics

For related information see also *Engineering*

70 PHYSICS (GENERAL)

For geophysics see *46 Geophysics* For astrophysics see *90 Astrophysics* For solar physics see *92 Solar Physics*

71 ACOUSTICS

Includes sound generation, transmission, and attenuation

For noise pollution see *45 Environment Pollution*

72 ATOMIC AND MOLECULAR PHYSICS

Includes atomic structure and molecular spectra

73 NUCLEAR AND HIGH-ENERGY PHYSICS

Includes elementary and nuclear particles, and reactor theory

For space radiation see *93 Space Radiation*

74 OPTICS

Includes light phenomena

75 PLASMA PHYSICS

Includes magnetohydrodynamics and plasma fusion

For ionospheric plasmas see *46 Geophysics* For space plasmas see *90 Astrophysics*

76 SOLID-STATE PHYSICS

Includes superconductivity

For related information see also *33 Electronics and Electrical Engineering* and *36 Lasers and Masers*

77 THERMODYNAMICS AND STATISTICAL PHYSICS

Includes quantum mechanics, and Bose and Fermi statistics

For related information see also *25 Inorganic and Physical Chemistry* and *34 Fluid Mechanics and Heat Transfer*

SOCIAL SCIENCES

Includes social sciences (general), administration and management, documentation and information science, economics and cost analysis, law and political science, and urban technology and transportation

80 SOCIAL SCIENCES (GENERAL)

Includes educational matters

81 ADMINISTRATION AND MANAGEMENT

Includes management planning and research

82 DOCUMENTATION AND INFORMATION SCIENCE

Includes information storage and retrieval technology, micrography, and library science

For computer documentation see *61 Computer Programming and Software*

83 ECONOMICS AND COST ANALYSIS

Includes cost effectiveness studies

84 LAW AND POLITICAL SCIENCE

Includes space law, international law, international cooperation, and patent policy

85 URBAN TECHNOLOGY AND TRANSPORTATION

Includes applications of space technology to urban problems, technology transfer, technology assessment, and surface and mass transportation

For related information see *03 Air Transportation and Safety*, *16 Space Transportation*, and *44 Energy Production and Conversion*

SPACE SCIENCES

Includes space sciences (general), astronomy, astrophysics, lunar and planetary exploration, solar physics, and space radiation

For related information see also *Geosciences*

88 SPACE SCIENCES (GENERAL)

89 ASTRONOMY

Includes radio and gamma-ray astronomy, celestial mechanics, and astrometry

90 ASTROPHYSICS

Includes cosmology, and interstellar and interplanetary gases and dust

91 LUNAR AND PLANETARY EXPLORATION

Includes planetology, and manned and unmanned flights

For spacecraft design see *18 Spacecraft Design, Testing and Performance* For space stations see *15 Launch Vehicles and Space Vehicles*

92 SOLAR PHYSICS

Includes solar activity, solar flares, solar radiation and sunspots

93 SPACE RADIATION

Includes cosmic radiation, and inner and outer earth's radiation belts

For biological effects of radiation see *52 Aerospace Medicine* For theory see *73 Nuclear and High-Energy Physics*

GENERAL

99 GENERAL

Section 2 • Indexes

SUBJECT INDEX	I-1
INVENTOR INDEX	I-229
SOURCE INDEX	I-321
NUMBER INDEX	I-375
ACCESSION NUMBER INDEX	I-463

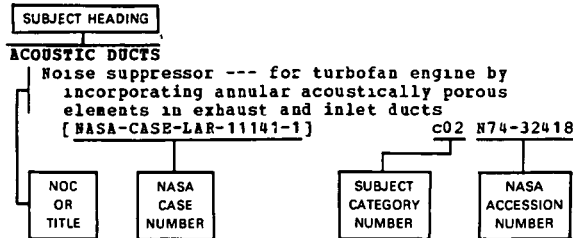
Subject Index

NASA PATENT ABSTRACTS BIBLIOGRAPHY

JANUARY 1978

Section 2

Typical Subject Index Listing



The subject heading is the key to the subject content of the document. A brief description of the document e.g. title title plus a title extension or Notation of Content (NOC) is included for each subject entry to indicate the subject heading context. These descriptions are arranged under each subject heading in ascending accession number order. The NASA Case Number serves as the prime access number to the patent documents. The Subject Category Number indicates the category in Section 1 (Abstracts) in which the patent citation and abstract are located. The NASA accession number denotes the number by which the citation is identified within the subject category.

A

ABLATION

- Transpirationally cooled heat ablation system for interplanetary spacecraft reentry shielding [NASA-CASE-XMS-02677] c31 N70-42075
- Hypersonic test facility for studying ablation in models under high pressure and high temperature [NASA-CASE-XLA-00378] c11 N71-15925
- Design of hypersonic test facility for ablation tests and performance tests of vehicles under conditions of high temperature and pressure [NASA-CASE-XLA-05378] c11 N71-21475
- Ablation sensor for measuring char layer recession rate using electric wires [NASA-CASE-XLA-01794] c33 N71-21586
- Ablation sensor for measuring surface ablation rate of material on vehicles entering earths atmosphere on entry into planetary atmospheres [NASA-CASE-XLA-01791] c14 N71-22991
- Ablative system with liquid carrying ablative material bodies and forming self-replacing ablative surface [NASA-CASE-LEW-10359] c33 N72-25911

ABLATIVE MATERIALS

- Filling honeycomb matrix with deaerated paste filler [NASA-CASE-XMS-01108] c15 N69-24322
- Sensor device with switches for measuring surface recession of charring and noncharring ablators [NASA-CASE-XLA-01781] c14 N69-39975
- Vacuum method for molding thermosetting compounds used as ablative materials [NASA-CASE-XLA-01091] c15 N71-10672
- Ablative resins used for retarding regression in ablative material [NASA-CASE-XLE-05913] c33 N71-14032
- Design, development, and characteristics of ablation structures [NASA-CASE-XMS-01816] c33 N71-15623
- Method and apparatus for fabrication of heat insulating and ablative reentry structure [NASA-CASE-XMS-02009] c33 N71-20834
- Production and application of sprayable fiber reinforced ablation material [NASA-CASE-XLA-04251] c18 N71-26100
- Ablative heat shield for protection from aerodynamic heating of reentry spacecraft [NASA-CASE-MSC-12143-1] c33 N72-17947
- Ablative system with liquid carrying ablative material bodies and forming self-replacing

- ablative surface [NASA-CASE-LEW-10359] c33 N72-25911
- Carrier liquid system containing bodies of ablative material [NASA-CASE-LEW-10359-2] c33 N73-25952
- Ablation article and surface for analyzing flow transition on ablative surface [NASA-CASE-LAR-10439-1] c33 N73-27796
- Dual measurement ablation sensor [NASA-CASE-LAR-10105-1] c34 N74-15652
- Intumescent-ablator coatings using endothermic fillers [NASA-CASE-ARC-11043-1] c34 N77-14372
- Sprayable low density ablator [NASA-CASE-MPS-23506-1] c24 N77-15105

ABORT APPARATUS

- Coupling device for linear shaped charge for space vehicle abort system [NASA-CASE-XLA-00189] c33 N70-36846

ABRASION RESISTANCE

- Zinc dust formulation for abrasion resistant steel coatings [NASA-CASE-GSC-10361-1] c18 N72-23581
- Improved nozzle for use with abrasive and/or corrosive materials [NASA-CASE-NPO-13823-1] c37 N77-17466
- Abrasion resistant coatings for plastic surfaces [NASA-CASE-ARC-10915-3] c24 N77-24200

ABSORBENTS

- Absorbent apparatus for separating gas from liquid-gas stream used in environmental control under zero gravity conditions [NASA-CASE-XMS-01492] c05 N70-41297
- Fluid flow control valve for regulating fluids in molecular quantities [NASA-CASE-XLE-00703] c15 N71-15967
- Noncontaminating swab with absorbent end covered with netted envelope to prevent egress of absorbent material [NASA-CASE-MPS-18100] c15 N72-11390
- Protein sterilization of firefly luciferase without denaturation [NASA-CASE-GSC-10225-1] c06 N73-27086
- Oil and fat absorbing polymers [NASA-CASE-NPO-11609-2] c27 N77-31308

ABSORBERS (MATERIALS)

- Broadband chokes and absorbers to reduce spurious radiation patterns of antenna array caused by support structures [NASA-CASE-XMS-05303] c07 N69-27462
- Analytical photoionization mass spectrometer with argon gas filter between light source and monochromator [NASA-CASE-LAR-10180-1] c06 N71-13461
- Development of filter system for control of outgas contamination in vacuum conditions using absorbent beds of molecular sieve zeolite, silica gel, and charcoal [NASA-CASE-MPS-14711] c15 N71-26185
- Development and characteristics of calorimeter with integral heat sink for maintenance of constant temperature [NASA-CASE-XMF-04208] c33 N71-29051
- Aldehyde-containing urea-absorbing polysaccharides [NASA-CASE-NPO-13620-1] c27 N77-30236

ABSORPTION CROSS SECTIONS

- Radiation source and detection system for measuring amount of liquid inside tanks independently of liquid configuration [NASA-CASE-MSC-12280] c27 N71-16348

ABSORPTIVITY

- Detector absorptivity measuring method and apparatus [NASA-CASE-LAR-10907-1] c35 N76-29551

SUBJECT

AC GENERATORS

Alternating current signal generator providing plurality of amplitude modulated output signals
[NASA-CASE-XNP-05612] c09 N69-21468

Improved alternator with windings of superconducting materials acting as permanent magnet
[NASA-CASE-XLE-02824] c03 N69-39890

Superconducting alternator design with cryogenic fluid for cooling windings below critical temperature
[NASA-CASE-XLE-02823] c09 N71-23443

ACCELERATION

Single grid accelerator system for electron bombardment type ion thruster
[NASA-CASE-XLE-10453-2] c28 N73-27699

ACCELERATION (PHYSICS)

Centrifuge mounted motion simulator with elevator mechanism
[NASA-CASE-XAC-00399] c11 N70-34815

Gravity device for accurate and rapid indication of relative gravity conditions aboard accelerating carrier
[NASA-CASE-XMF-00424] c11 N70-38196

Development of method for producing artificial gravity in manned spacecraft
[NASA-CASE-XNP-02595] c31 N71-21881

Vibration control of flexible bodies in steady accelerating environment
[NASA-CASE-LAR-10106-1] c15 N71-27169

G-load measuring and indicator apparatus --- for aircraft
[NASA-CASE-ARC-10806] c06 N74-27872

Apparatus for applying simulator g-forces to an arm of an aircraft simulator pilot
[NASA-CASE-LAR-10550-1] c09 N74-30597

G-load measuring and indicator apparatus
[NASA-CASE-ARC-10806-1] c35 N75-29381

A seat cushion to provide realistic acceleration cues for aircraft simulator pilots
[NASA-CASE-LAR-12149-1] c54 N77-31787

ACCELERATION PROTECTION

Astronaut restraint suit for high acceleration protection
[NASA-CASE-XAC-00405] c05 N70-41819

ACCELERATION STRESSES (PHYSIOLOGY)

Development of method for producing artificial gravity in manned spacecraft
[NASA-CASE-XNP-02595] c31 N71-21881

ACCELERATION TOLERANCE

Electronic detection system for peak acceleration limits in vibrational testing of spacecraft components
[NASA-CASE-NPO-10556] c14 N71-27185

ACCELERATORS

Annular arc accelerator shock tube
[NASA-CASE-NPO-13528-1] c09 N77-10071

Spring operated accelerator and constant force spring mechanism therefor
[NASA-CASE-ARC-10898-1] c35 N77-18417

ACCELEROMETERS

Superconductive accelerometer employing variable force principle to determine acceleration of bodies
[NASA-CASE-XMF-01099] c14 N71-15969

Describing device for velocity control of electromechanical drive mechanism of scanning mirror of interferometer
[NASA-CASE-XGS-03532] c14 N71-17627

Omnidirectional liquid filled accelerometer design with liquid and housing temperature compensation
[NASA-CASE-HQN-10780] c14 N71-30265

Development of combined velocimeter and accelerometer based on color changes in liquid crystalline material subjected to shear stresses
[NASA-CASE-ERC-10292] c14 N72-25410

Temperature compensated digital inertial sensor --- circuit for maintaining inertial element of gyroscope or accelerometer at constant position
[NASA-CASE-NPO-13044-1] c35 N74-15094

Accelerometer telemetry system
[NASA-CASE-ARC-10849-1] c17 N76-29347

ACCEPTOR MATERIALS

III-V photocathode with nitrogen doping for increased quantum efficiency
[NASA-CASE-NPO-12134-1] c33 N76-31409

ACCUMULATORS

Direct radiation cooling of linear beam collector tubes
[NASA-CASE-XNP-09227] c15 N69-24319

Regenerative cooling system for small rocket engine having restart capability and using noncryogenic hypergolic propellants
[NASA-CASE-XLE-00685] c28 N70-41992

Small plasma probe using tungsten wire collector in tubular shield
[NASA-CASE-XLE-02578] c25 N71-20747

Electrostatic charged particle collector containing stacked electrodes for microwave tube
[NASA-CASE-LZW-11192-1] c09 N73-13208

Accumulator

[NASA-CASE-MPS-19287-1] c34 N77-30399

ACETALS

Synthesis of schiff bases for heat shields by acetal amine reactions
[NASA-CASE-XMF-08652] c06 N71-11243

ACETYLENE

Preparation of dicyanoacetylene and vinylidene copolymers using organic compounds
[NASA-CASE-XNP-03250] c06 N71-23500

ACOUSTIC ATTENUATION

Ultrasonic calibration device --- for producing changes in acoustic attenuation and phase velocity
[NASA-CASE-LAR-11435-1] c35 N76-15432

ACOUSTIC DUCTS

Noise suppressor --- for turbofan engine by incorporating annular acoustically porous elements in exhaust and inlet ducts
[NASA-CASE-LAR-11141-1] c07 N74-32418

ACOUSTIC IMPEDANCE

Method and transducer device for detecting presence of hydrogen gas
[NASA-CASE-XMF-03873] c06 N69-39733

ACOUSTIC MEASUREMENTS

Instrumentation for measuring aircraft noise and sonic boom
[NASA-CASE-LAR-11476-1] c07 N76-27232

A miniature implantable ultrasonic echosonometer
[NASA-CASE-ARC-11035-1] c52 N77-15621

Optically selective, acoustically resonant gas detecting transducer
[NASA-CASE-ARC-10639-1] c35 N77-19388

Differential sound level meter
[NASA-CASE-LAR-12106-1] c35 N77-23441

ACOUSTIC PROPAGATION

Material suspension within an acoustically excited resonant chamber --- at near weightless conditions
[NASA-CASE-NPO-13263-1] c12 N75-24774

Hearing aid malfunction detection system
[NASA-CASE-MSC-14916-1] c33 N77-13335

ACOUSTIC PROPERTIES

Development of wind tunnel microphone structure to minimize effects of vibrations and eliminate unwanted signals in microphone output
[NASA-CASE-XNP-00250] c11 N71-28779

Acoustical transducer calibrating system including differential pressure activating device
[NASA-CASE-FRC-10060-1] c14 N73-27379

ACOUSTICAL HOLOGRAPHY

Hybrid holographic non-destructive test system --- optical and acoustical methods capable of detecting flaws in materials
[NASA-CASE-MPS-23114-1] c35 N76-24529

ACOUSTICS

Acoustic energy shaping
[NASA-CASE-NPO-13802-1] c71 N76-18886

ACOUSTO-OPTICS

Acoustic vibration test apparatus for wiring harnesses
[NASA-CASE-MSC-15158-1] c14 N72-17325

Differential optoacoustic absorption detector
[NASA-CASE-NPO-13759-1] c35 N77-11363

Method and apparatus for background signal reduction in opto-acoustic absorption measurement
[NASA-CASE-NPO-13683-1] c35 N77-14411

ACRYLATES

Ablative resins used for retarding regression in ablative material
[NASA-CASE-XLE-05913] c33 N71-14032

Durable antistatic coating for polymethylmethacrylate

- [NASA-CASE-NPO-13867-1] c27 N77-22257
- ACRYLIC RESINS**
- Abrasion resistant coatings for plastic surfaces [NASA-CASE-ARC-10915-3] c24 N77-24200
- ACTIVATION ENERGY**
- Heat activated emf cells with aluminum anode [NASA-CASE-LEW-11359] c03 N71-28579
- Heat activated cell with aluminum anode [NASA-CASE-LEW-11359-2] c03 N72-20034
- ACTUATOR DISKS**
- Cryogenic gyroscope housing --- with annular disks for gas spin-up [NASA-CASE-MFS-21136-1] c35 N74-18323
- ACTUATORS**
- Electromechanical actuator and its use in rocket thrust control valve [NASA-CASE-XNP-05975] c15 N69-23185
- Power controlled bimetallic electromechanical actuator for accurate, timely, and reliable response to remote control signal [NASA-CASE-XNP-09776] c09 N69-39929
- Patent data on gas actuated bolt disconnect assembly [NASA-CASE-XLA-00326] c03 N70-34667
- Hermetically sealed explosive release mechanism for actuator device [NASA-CASE-XGS-00824] c15 N71-16078
- Burst diaphragm flow initiator for installation in short duration wind tunnels [NASA-CASE-MFS-12915] c11 N71-17600
- Hand controller operable about three respectively perpendicular axes and capable of actuating signal generators for attitude control devices [NASA-CASE-XMS-07487] c15 N71-23255
- Mechanical actuator wherein linear motion changes to rotational motion [NASA-CASE-XGS-04548] c15 N71-24045
- Hydraulic actuator design for space deployment of heat radiators [NASA-CASE-MSC-11817-1] c15 N71-26611
- Electromechanical control actuator system using double differential screws [NASA-CASE-ERC-10022] c15 N71-26635
- System to control speed of hydraulically movable members by limiting energy applied to actuators with hydraulic servo loop [NASA-CASE-ARC-10131-1] c15 N71-27754
- Zero power telemetry actuated switch for biomedical equipment [NASA-CASE-ARC-10105] c09 N72-17153
- Mechanically operated hand which can depress trigger using touch control device [NASA-CASE-MFS-20413] c15 N72-21463
- Hermetically sealed elbow actuator for use in severe environments [NASA-CASE-MFS-14710] c09 N72-22195
- Characteristics of lightweight actuator for imparting linear motion using elongated output shaft [NASA-CASE-NPO-11222] c15 N72-25456
- Rotary actuator for use in environments with no rolling and sliding friction [NASA-CASE-NPO-10244] c15 N72-26371
- Gas-operated actuator with cyclic motion of expansion chamber [NASA-CASE-NPO-11340] c15 N72-33477
- Redundant hydraulic control system for actuators with three main valve combination [NASA-CASE-MFS-20944] c15 N73-13466
- Actuator operated by electrolytic drive gas generator and evacuator [NASA-CASE-NPO-11369] c15 N73-13467
- Manual actuator --- for spacecraft exercising machines [NASA-CASE-MFS-21481-1] c37 N74-18127
- Optically actuated two position mechanical mover [NASA-CASE-NPO-13105-1] c37 N74-21060
- Miniature hydraulic actuator --- for control surfaces on airfoils [NASA-CASE-LAR-11522-1] c34 N74-34881
- Dual output variable pitch turbofan actuation system [NASA-CASE-LEW-12419-1] c07 N77-14025
- Actuator device for artificial leg [NASA-CASE-MFS-23225-1] c52 N77-14735
- Actuator mechanism [NASA-CASE-GSC-11883-2] c37 N77-15400
- Cyclical bi-directional rotary actuator [NASA-CASE-GSC-11883-1] c37 N77-19458
- ADAPTERS**
- Camera adapter design for image magnification including lens and illuminator [NASA-CASE-XNP-03844-1] c14 N71-26474
- ADAPTIVE CONTROL**
- Self testing and repairing computer comprising control and diagnostic unit and rollback points for error correction [NASA-CASE-NPO-10567] c08 N71-24633
- Synchronous dc direct-drive system comprising multiple-loop hybrid control system controlling load directly connected to actuator [NASA-CASE-GSC-10065-1] c10 N71-27136
- Versatile ergometer with work load control [NASA-CASE-MFS-21109-1] c05 N73-27941
- Adaptive voting computer system [NASA-CASE-MSC-13932-1] c62 N74-14920
- ADAPTIVE FILTERS**
- Adaptive notch filter, using modulation techniques for reversed phase noise signal [NASA-CASE-XNP-01892] c10 N71-22986
- ADDING CIRCUITS**
- Circuit diagram and operation of full binary adder [NASA-CASE-XGS-00689] c08 N70-34787
- Error correction circuitry for binary signal channels [NASA-CASE-XNP-03263] c09 N71-18843
- ADDITIVES**
- Ammonium perchlorate composite propellant with organic Cu/II/ chelate catalytic additive [NASA-CASE-LAR-10173-1] c27 N71-14090
- Tantalum modified ferritic iron base alloys --- for use in high temperature environments [NASA-CASE-LEW-12095-1] c26 N76-17233
- ADENOSINE TRIPHOSPHATE**
- Use of enzyme hexokinase and glucose to reduce inherent light levels of ATP in luciferase compositions [NASA-CASE-XGS-05533] c04 N69-27487
- Detection instrument for light emitted from ATP biochemical reaction [NASA-CASE-XGS-05534] c23 N71-16355
- Describing method for lyophilization of luciferase containing mixtures for use in life detection reactions [NASA-CASE-XGS-05532] c06 N71-17705
- Automatic device for assaying urine on bacterial adenosine triphosphate content [NASA-CASE-GSC-11169-2] c05 N73-32011
- Application of luciferase assay for ATP to antimicrobial drug susceptibility [NASA-CASE-GSC-12039-1] c51 N77-22794
- ADHESION**
- Tool for mounting and removing studs with adhesive coated head portion [NASA-CASE-MFS-20299] c15 N72-11392
- ADHESION TESTS**
- Apparatus for determining quality of bond between high density material and low density material [NASA-CASE-MFS-13686] c15 N71-18132
- ADHESIVE BONDING**
- Fabrication of solar cell banks for attaching solar cells to base members or substrates [NASA-CASE-XNP-00826] c03 N71-20895
- Method for honeycomb panel bonding by thermosetting film adhesive with electrical heat means [NASA-CASE-XNP-01402] c18 N71-21651
- Etching aluminum alloys with aqueous solution containing sulfuric acid, hydrofluoric acid, and an alkali metal dischromate for adhesive bonding [NASA-CASE-XNP-02303] c17 N71-23828
- Adhesive spray process for attaching biomedical skin electrodes [NASA-CASE-XPR-07658-1] c05 N71-26293
- Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide [NASA-CASE-GSC-11577-1] c37 N75-15992
- Thermal insulation attaching means [NASA-CASE-MSC-12619-1] c39 N75-21671
- Weld-bonded titanium structures [NASA-CASE-LAR-11549-1] c37 N77-11397
- Surface finishing --- of metal airfoils by adhesive bonding [NASA-CASE-MSC-12631-2] c05 N77-31131

- Thermal insulation attaching means --- adhesive bonding of felt vibration isolators under ceramic tiles
[NASA-CASE-MSC-12619-2] c16 N77-31237
- ADHESIVES**
Polyimide adhesives
[NASA-CASE-LAR-11397-1] c27 N75-29263
Polyimide adhesives
[NASA-CASE-LAR-12181-1] c27 N77-15192
- ADJUSTING**
Centering device with ultrafine adjustment for use with roundness measuring apparatus
[NASA-CASE-XMF-00480] c14 N70-39898
Slotted fine-adjustment support for optical devices
[NASA-CASE-MFS-20249] c15 N72-11386
Adjustable support device with jacket screw for altering distance between base and supported member
[NASA-CASE-NPO-10721] c15 N72-27484
Clock setter
[NASA-CASE-LAR-11458-1] c35 N76-16392
- AERIAL RUDDERS**
Thrust augmented spin recovery device
[NASA-CASE-LAR-11970-1] c08 N77-22147
- AERODYNAMIC BRAKES**
Bluff-shaped annular configuration for supersonic decelerator for reentry vehicles
[NASA-CASE-XLE-00222] c02 N70-37939
Lightweight, variable solidity knitted parachute fabric --- for aerodynamic decelerators
[NASA-CASE-LAR-10776-1] c02 N74-10034
- AERODYNAMIC CHARACTERISTICS**
Variable aspect ratio and variable sweep delta wing planforms for supersonic aircraft
[NASA-CASE-XLA-00221] c02 N70-33266
Designing spacecraft for flight into space, atmospheric reentry, and landing at selected sites
[NASA-CASE-XAC-02058] c02 N71-16087
Spacecraft configurations and aerodynamic characteristics of space shuttle systems with two reusable stages
[NASA-CASE-MSC-12433] c31 N73-14854
Airfoil shape for flight at subsonic speeds --- design analysis and aerodynamic characteristics of the GAW-1 airfoil
[NASA-CASE-LAR-10585-1] c02 N76-22154
- AERODYNAMIC COEFFICIENTS**
Nondestructive method for instrumenting helicopter rotor blades
[NASA-CASE-LAR-11201-1] c35 N77-22452
- AERODYNAMIC CONFIGURATIONS**
Supersonic aircraft configuration providing for variable aspect ratio and variable sweep wings
[NASA-CASE-XLA-00166] c02 N70-34178
Aerodynamic configuration for aircraft capable of high speed flight and low drag for low speed takeoff or landing upon presently existing airfields
[NASA-CASE-XLA-00806] c02 N70-34858
Manned space capsule configuration for orbital flight and atmospheric reentry
[NASA-CASE-XLA-00149] c31 N70-37938
Aerodynamic configuration of reentry vehicle heat shield to provide longitudinal and directional stability at hypersonic velocities
[NASA-CASE-XMS-04142] c31 N70-41631
Development and characteristics of translating horizontal tail assembly for supersonic aircraft
[NASA-CASE-XLA-08801-1] c02 N71-11043
Variable geometry manned orbital vehicle having high aerodynamic efficiency over wide speed range and incorporating auxiliary pivotal wings
[NASA-CASE-XLA-03691] c31 N71-15674
Afterburner-equipped jet engine nacelle with slotted configuration afterbody
[NASA-CASE-XLA-10450] c28 N71-21493
Variable geometry rotor system for direct control over wake vortex
[NASA-CASE-LAR-10557] c02 N72-11018
Development of auxiliary lifting system to provide ferry capability for entry vehicles
[NASA-CASE-LAR-10574-1] c11 N73-13257
Multistage aerospace craft --- perspective drawings of conceptual design
[NASA-CASE-XMF-02263] c05 N74-10907
Supersonic fan blading --- noise reduction in turbofan engines
[NASA-CASE-LEW-11402-1] c07 N74-28226
Aircraft design concept
[NASA-CASE-LAR-11852-1] c05 N77-15027
An improved free wing for an aircraft
[NASA-CASE-FRC-10092-1] c05 N77-31135
- AERODYNAMIC HEATING**
Development of thermal insulation system for wing and control surfaces of hypersonic aircraft and reentry vehicles
[NASA-CASE-XLA-00892] c33 N71-17897
Heat flux sensor adapted for mounting on aircraft or spacecraft to measure aerodynamic heat flux inflow to aircraft skin
[NASA-CASE-XFR-03802] c33 N71-23085
Ablative heat shield for protection from aerodynamic heating of reentry spacecraft
[NASA-CASE-MSC-12143-1] c33 N72-17947
- AERODYNAMIC LOADS**
Directed fluid stream for propeller blade loading control
[NASA-CASE-XAC-00139] c02 N70-34856
- AERODYNAMIC NOISE**
Apparatus for reducing aerodynamic noise in a wind tunnel
[NASA-CASE-MFS-23099-1] c09 N76-23273
- AERODYNAMIC STABILITY**
Aerodynamically stable meteorological balloon using surface roughness effect
[NASA-CASE-XMF-04163] c02 N71-23007
Pressure sensor network for measuring liquid dynamic response in flight including fuel tank acceleration, liquid slosh amplitude, and fuel depth monitoring
[NASA-CASE-XLA-05541] c12 N71-26387
Spacecraft design with single point aerodynamic and hydrodynamic stability for emergency transport of men from space station to splashdown
[NASA-CASE-MSC-13281] c31 N72-18859
High lift aircraft --- with improved stability, control, performance, and noise characteristics
[NASA-CASE-LAR-11252-1] c05 N75-25914
Hingeless helicopter rotor with improved stability
[NASA-CASE-ARC-10807-1] c05 N77-17029
- AERONAUTICAL ENGINEERING**
Differential pressure cell insensitive to changes in ambient temperature and extreme overload
[NASA-CASE-XAC-00042] c14 N70-34816
- AEROSOLS**
Liquid aerosol dispenser with explosively driven piston to compress light gas to extremely high pressure
[NASA-CASE-MFS-20829] c12 N72-21310
Particulate and aerosol detector
[NASA-CASE-LAR-11434-1] c35 N76-22509
A method for aerosol analysis by thermoluminescence
[NASA-CASE-LAR-12046-1] c45 N77-17609
- AEROSPACE ENGINEERING**
Modifying existing solar cells for temperature control
[NASA-CASE-NPO-10109] c03 N71-11049
Metallic film diffusion for boundary lubrication in aerospace engineering
[NASA-CASE-XLE-10337] c15 N71-24046
Soldering device particularly suited to making high quality wiring joints for aerospace engineering utilizing capillary attraction to regulate flow of solder
[NASA-CASE-XLA-08911] c15 N71-27214
- AEROSPACE ENVIRONMENTS**
High voltage insulators for direct current in acceleration system of electrostatic thruster
[NASA-CASE-XLE-01902] c28 N71-10574
Metallic film diffusion into metal or ceramic surfaces for boundary lubrication in aerospace environments
[NASA-CASE-XLE-01765] c18 N71-10772
Preparation of inorganic solid film lubricants with long wear life and stability in aerospace environments
[NASA-CASE-XMF-03988] c15 N71-21403
Momentum-velocity analyzer for measuring minute space particles
[NASA-CASE-XMS-04201] c14 N71-22990
Metal alloy bearing materials for space applications
[NASA-CASE-XLE-05033] c15 N71-23810

- Method and apparatus for adjusting thermal conductance in electronic components for space use
[NASA-CASE-XNP-05524] c33 N71-24876
- Space environment simulator for testing spacecraft components under aerospace conditions
[NASA-CASE-NPO-10141] c11 N71-24964
- High dc switch for causing abrupt, cyclic, decreases of current to operate under zero or varying gravity conditions
[NASA-CASE-LEW-10155-1] c09 N71-29035
- Automatic biowaste sampling
[NASA-CASE-MSC-14640-1] c54 N76-14804
- General purpose rocket furnace
[NASA-CASE-MFS-23460-1] c09 N77-12070
- AEROSPACE MEDICINE**
- Piston device for producing known constant positive pressure within lungs by using thoracic muscles
[NASA-CASE-XMS-01615] c05 N70-41329
- An improved cooling system for removing metabolic heat from an hermetically sealed spacesuit
[NASA-CASE-ARC-11059-1] c54 N77-14743
- AEROSPACE VEHICLES**
- Aerospace configuration with low and high aspect ratio variability for high and low speed flight
[NASA-CASE-XLA-00142] c02 N70-33286
- Landing pad assembly for aerospace vehicles
[NASA-CASE-XNP-02853] c31 N70-36654
- Aerospace vehicle with variable planform for hypersonic and subsonic flight
[NASA-CASE-XLA-00805] c31 N70-38010
- Development of resilient fastener for attaching skin of aerospace vehicles to permit movement of skin relative to framework
[NASA-CASE-XLA-01027] c31 N71-24035
- Chemical spot tests for identification of titanium and titanium alloys used in aerospace vehicles
[NASA-CASE-LAR-10539-1] c17 N73-12547
- AEROSPACEPLANES**
- Multistage aerospace craft --- perspective drawings of conceptual design
[NASA-CASE-XNP-02263] c05 N74-10907
- AFTERBODIES**
- Afterburner-equipped jet engine nacelle with slotted configuration afterbody
[NASA-CASE-XLA-10450] c28 N71-21493
- AFTERBURNING**
- Exhaust nozzle with afterburning for generating thrust
[NASA-CASE-XLA-00154] c28 N70-33374
- AGING (MATERIALS)**
- Method of heat treating age-hardenable alloys
[NASA-CASE-XNP-01311] c26 N75-29236
- AGRICULTURE**
- Solar-powered pump
[NASA-CASE-NPO-13567-1] c44 N76-29701
- AILERONS**
- Device for controlling rotary potentiometer mounted on aircraft steering wheel or aileron control
[NASA-CASE-XAC-10019] c15 N71-23809
- AIR**
- Gas purged dry box glove reducing permeation of air or moisture into dry box or isolator by diffusion through glove
[NASA-CASE-XLE-02531] c05 N71-23080
- Superconducting magnetic field trapping device for producing magnetic field in air
[NASA-CASE-XNP-01185] c26 N73-28710
- AIR CONDITIONING EQUIPMENT**
- Portable apparatus producing high velocity annular air column surrounding low velocity, filtered, superclean air central core for industrial clean room environmental control
[NASA-CASE-XNP-03212] c15 N71-22721
- Air conditioning system and component therefore distributing air flow from opposite directions
[NASA-CASE-GSC-11445-1] c31 N74-27902
- AIR COOLING**
- Modification and improvement of turbine blades for maximum cooling efficiency
[NASA-CASE-XLB-00092] c15 N70-33264
- AIR FILTERS**
- Development of filter apparatus for gas separation and characteristics of filter cell support frame for improved operation
[NASA-CASE-MSC-12297] c14 N72-23457
- AIR FLOW**
- Wind tunnel air flow modulating device and apparatus for selectively generating wave motion in wind tunnel airstream
[NASA-CASE-XLA-00112] c11 N70-33287
- Photographing surface flow patterns on wind tunnel test models
[NASA-CASE-XLA-01353] c14 N70-41366
- Method for maintaining good performance in gas turbine during air flow distortion
[NASA-CASE-LEW-10286-1] c28 N71-28915
- Apparatus and method for generating large mass flow of high temperature air at hypersonic speeds
[NASA-CASE-LAR-10612-1] c12 N73-28144
- Air conditioning system and component therefore distributing air flow from opposite directions
[NASA-CASE-GSC-11445-1] c31 N74-27902
- Controlled separation combustor --- airflow distribution in gas turbine engines
[NASA-CASE-LEW-11593-1] c20 N76-14190
- Method and apparatus for fluffing, separating, and cleaning fibers
[NASA-CASE-LAR-11224-1] c37 N76-18456
- Smoke generator
[NASA-CASE-ARC-10905-1] c37 N77-13418
- AIR INTAKES**
- Aeroflexible wing structure with air scoop for inflating stiffeners with ram air
[NASA-CASE-XLA-06095] c01 N69-39981
- Reversed cowl flap inlet thrust augmentor --- with adjustable airfoil
[NASA-CASE-ARC-10754-1] c07 N75-24736
- AIR LOCKS**
- Spacecraft air lock system to provide ingress and egress of astronaut without subjecting vehicular environment to vacuum of space
[NASA-CASE-XLA-02050] c31 N71-22968
- System for removing and repairing spacecraft control thrusters by use of portable air locks
[NASA-CASE-MFS-20325] c28 N71-27095
- Airlock for waste transferal from pressurized enclosure aboard space vehicle to waste receiver at negative pressure
[NASA-CASE-MFS-20922] c31 N72-20840
- Airlock
[NASA-CASE-MFS-20922-1] c18 N74-22136
- Apparatus for inserting and removing specimens from high temperature vacuum furnaces
[NASA-CASE-LAR-10841-1] c31 N74-27900
- AIR POLLUTION**
- Analytical photoionization mass spectrometer with argon gas filter between light source and monochromator
[NASA-CASE-LAR-10180-1] c06 N71-13461
- Contamination free separation nut eliminating combustion products from ambient surroundings generated by squib firing
[NASA-CASE-IGS-01971] c15 N71-15922
- Monitoring atmospheric pollutants with a heterodyne radiometer transmitter-receiver
[NASA-CASE-NPO-11919-1] c35 N74-11284
- Fluorescence detector for monitoring atmospheric pollutants
[NASA-CASE-NPO-13231-1] c45 N75-27585
- Stack plume visualization system
[NASA-CASE-LAR-11675-1] c45 N76-17656
- Indicator providing continuous indication of the presence of a specific pollutant in air
[NASA-CASE-NPO-13474-1] c45 N76-21742
- Method for detecting pollutants --- through chemical reactions and heat treatment
[NASA-CASE-LAR-11405-1] c45 N76-31714
- Automotive gas turbine fuel control
[NASA-CASE-LEW-12785-1] c37 N77-13426
- Combustion engine --- for air pollution control
[NASA-CASE-NPO-13671-1] c37 N77-31497
- AIR PURIFICATION**
- Developing high pressure gas purification and filtration system for use in test operations of space vehicles
[NASA-CASE-MFS-12806] c14 N71-17588
- Portable apparatus producing high velocity annular air column surrounding low velocity, filtered, superclean air central core for industrial clean room environmental control
[NASA-CASE-XNP-03212] c15 N71-22721

AIR SAMPLING

Pressure probe for sensing ambient static air pressures
[NASA-CASE-XLA-00481] c14 N70-36824
Sampler of gas borne particles
[NASA-CASE-NPO-13396-1] c35 N76-18401

AIR TRAFFIC CONTROL

Traffic control system for supersonic transports using synchronous satellite for data relay between vehicles and ground station
[NASA-CASE-GSC-10087-1] c02 N71-19287
Satellite aided aircraft collision avoidance system effective for large number of aircraft
[NASA-CASE-ERC-10090] c21 N71-24948
System and method for position locating for air traffic control involving supersonic transports
[NASA-CASE-GSC-10087-3] c07 N72-12080

AIRBORNE EQUIPMENT

Inflatable radar reflector unit - lightweight, highly reflective to electromagnetic radiation, and adaptable for erection and deployment with minimum effort and time
[NASA-CASE-XMS-00893] c07 N70-40063

AIRBORNE/SPACEBORNE COMPUTERS

Logic circuit to ripple add and subtract binary counters for spaceborne computers
[NASA-CASE-XGS-04766] c08 N71-18602
Shared memory for a fault-tolerant computer
[NASA-CASE-NPO-13139-1] c60 N76-21914

AIRCRAFT

Pilot warning indicator system of intruder aircraft
[NASA-CASE-ERC-10226-1] c14 N73-16483

AIRCRAFT ACCIDENTS

Satellite aided aircraft collision avoidance system effective for large number of aircraft
[NASA-CASE-ERC-10090] c21 N71-24948

AIRCRAFT ANTENNAS

Thin conformal antenna array for microwave power conversion
[NASA-CASE-NPO-13886-1] c32 N77-11269

AIRCRAFT APPROACH SPACING

Economical satellite aided vehicle avoidance system for preventing midair collisions
[NASA-CASE-ERC-10419] c21 N72-21631

AIRCRAFT COMPARTMENTS

Aircraft design concept
[NASA-CASE-LAR-11852-1] c05 N77-15027

AIRCRAFT CONFIGURATIONS

Variable sweep wing configuration for supersonic aircraft
[NASA-CASE-XLA-00230] c02 N70-33255
Television simulation for aircraft and space flight
[NASA-CASE-XFR-03107] c09 N71-19449
Design of dual fuselage aircraft with pivoting wing and horizontal stabilizer to permit yawing of wing in flight for high speed operation
[NASA-CASE-ARC-10470-1] c02 N73-26005
Development of aircraft configuration for reduction of jet aircraft noise by exhausting engine gases over upper surface of wing
[NASA-CASE-LAR-11087-1] c02 N73-26008
Variable dihedral shuttle orbiter
[NASA-CASE-LAR-10706-2] c05 N77-31132

AIRCRAFT CONTROL

Development and characteristics of control system for flexible wings
[NASA-CASE-XLA-06958] c02 N71-11038
Development of attitude control system for vertical takeoff aircraft using reaction nozzles displaced from various axes of aircraft
[NASA-CASE-XAC-08972] c02 N71-20570
Device for controlling rotary potentiometer mounted on aircraft steering wheel or aileron control
[NASA-CASE-XAC-10019] c15 N71-23809
Direct lift control system having flaps with slots adjacent to their leading edge and particularly adapted for lightweight aircraft
[NASA-CASE-LAR-10249-1] c02 N71-26110
Supersonic or hypersonic vehicle control system comprising elevons with hinge line sweep and free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088
Development of aircraft control system with high performance electrically controlled and mechanically operated hydraulic valves for

precise flight operation
[NASA-CASE-XAC-00048] c02 N71-29128
Development of thrust control system for application to control of aircraft and spacecraft
[NASA-CASE-MSC-13397-1] c21 N72-25595
Aircraft control system for rotary wing aircraft
[NASA-CASE-ERC-10439] c02 N73-19004
Situational display system of cathode ray tubes to assist pilot in aircraft control
[NASA-CASE-ERC-10350] c14 N73-20474
Development of aerodynamic control system to control flutter over large range of oscillatory frequencies using stability augmentation techniques
[NASA-CASE-LAR-10682-1] c02 N73-26004
Integrated lift/drag controller for aircraft
[NASA-CASE-ARC-10456-1] c05 N75-12930
High lift aircraft --- with improved stability, control, performance, and noise characteristics
[NASA-CASE-LAR-11252-1] c05 N75-25914
Vortex-lift roll-control device
[NASA-CASE-LAR-11868-2] c08 N77-31176

AIRCRAFT DESIGN
Design of supersonic aircraft with novel fixed, swept wing planform
[NASA-CASE-XLA-04451] c02 N71-12243
Design of dual fuselage aircraft with pivoting wing and horizontal stabilizer to permit yawing of wing in flight for high speed operation
[NASA-CASE-ARC-10470-1] c02 N73-26005
Multistage aerospace craft --- perspective drawings of conceptual design
[NASA-CASE-XMP-02263] c05 N74-10907
High lift aircraft --- with improved stability, control, performance, and noise characteristics
[NASA-CASE-LAR-11252-1] c05 N75-25914
Oblique-wing supersonic aircraft
[NASA-CASE-ARC-10470-3] c05 N76-29217
Supersonic transport --- aircraft design
[NASA-CASE-LAR-11932-1] c05 N76-31219
Aircraft design concept
[NASA-CASE-LAR-11852-1] c05 N77-15027

AIRCRAFT DETECTION
Surface based altitude measuring system for accurately measuring altitude of airborne vehicle
[NASA-CASE-ERC-10412-1] c09 N73-12211

AIRCRAFT ENGINES
Noise suppressor --- for turbofan engine by incorporating annular acoustically porous elements in exhaust and inlet ducts
[NASA-CASE-LAR-11141-1] c07 N74-32418
Auxiliary power system for actively cooled aircraft
[NASA-CASE-LAR-11626-1] c34 N77-12332
Dual cycle aircraft turbine engine
[NASA-CASE-LAR-11310-1] c07 N77-28118

AIRCRAFT EQUIPMENT
Development of radiometric sensor to warn aircraft pilots of region of clear air turbulence along flight path
[NASA-CASE-ERC-10081] c14 N72-28437

AIRCRAFT GUIDANCE
Terminal guidance system --- for guiding aircraft into preselected altitude and/or heading at terminal point
[NASA-CASE-FRC-10049-1] c04 N74-13420

AIRCRAFT HAZARDS
Deflector for preventing objects from entering nacelle inlets of jet aircraft
[NASA-CASE-XLB-00388] c28 N70-34788

AIRCRAFT HYDRAULIC SYSTEMS
Variable-orifice hydraulic mechanism for aircraft gas turbine engine fuel control
[NASA-CASE-LEW-11187-1] c28 N73-19793

AIRCRAFT INSTRUMENTS
Aircraft instrument for indicating malfunctions during takeoff
[NASA-CASE-XLA-00100] c14 N70-36807
Pressure probe for sensing ambient static air pressures
[NASA-CASE-XLA-00481] c14 N70-36824
Aircraft indicator for pilot control of takeoff roll, climbout path and verticle flight path in poor visibility conditions
[NASA-CASE-XLA-00487] c14 N70-40157

- Optical projector system for establishing optimum arrangement of instrument displays in aircraft, spacecraft, other vehicles, and industrial instrument consoles
[NASA-CASE-XNP-03853] c23 N71-21882
- Combined optical attitude and altitude indicating instrument for use in aircraft or spacecraft
[NASA-CASE-XLA-01907] c14 N71-23268
- Aircraft horizon and vertical indicator
[NASA-CASE-ERC-10392] c21 N73-14692
- G-load measuring and indicator apparatus
[NASA-CASE-ARC-10806-1] c35 N75-29381
- Magnetic heading reference
[NASA-CASE-LAR-11387-1] c04 N76-20114
- Turbulence intensity indicator
[NASA-CASE-LAR-11833-1] c06 N76-31229
- Aircraft-mounted crash-activated transmitter device
[NASA-CASE-MFS-16609-3] c03 N76-32140
- AIRCRAFT LANDING**
- Aerodynamic configuration for aircraft capable of high speed flight and low drag for low speed takeoff or landing upon presently existing airfields
[NASA-CASE-XLA-00806] c02 N70-34858
- Magnetic method for detection of aircraft position relative to runway
[NASA-CASE-ARC-10179-1] c21 N72-22619
- Integrated lift/drag controller for aircraft
[NASA-CASE-ARC-10456-1] c05 N75-12930
- Vehicle simulator binocular multiplanar visual display system
[NASA-CASE-ARC-10808-1] c09 N76-24280
- AIRCRAFT LAUNCHING DEVICES**
- Rotating launch device for a remotely piloted aircraft
[NASA-CASE-ARC-10979-1] c09 N77-19076
- AIRCRAFT MANEUVERS**
- G-load measuring and indicator apparatus
[NASA-CASE-ARC-10806-1] c35 N75-29381
- AIRCRAFT MODELS**
- Free flight suspension system for use with aircraft models in wind tunnel tests
[NASA-CASE-XLA-00939] c11 N71-15926
- Variable geometry wind tunnel for testing aircraft models at subsonic speeds
[NASA-CASE-XLA-07430] c11 N72-22246
- Deploy/release system --- model aircraft flight control
[NASA-CASE-LAR-11575-1] c02 N76-16014
- AIRCRAFT NOISE**
- Instrumentation for measuring aircraft noise and sonic boom
[NASA-CASE-LAR-11476-1] c07 N76-27232
- AIRCRAFT PERFORMANCE**
- Development of auxiliary lifting system to provide ferry capability for entry vehicles
[NASA-CASE-LAR-10574-1] c11 N73-13257
- AIRCRAFT PILOTS**
- Apparatus for applying simulator g-forces to an arm of an aircraft simulator pilot
[NASA-CASE-LAR-10550-1] c09 N74-30597
- AIRCRAFT SAFETY**
- Aircraft instrument for indicating malfunctions during takeoff
[NASA-CASE-XLA-00100] c14 N70-36807
- Development and operating principles of collision warning system for aircraft accident prevention
[NASA-CASE-HQN-10703] c21 N73-13643
- Deployable flexible ventral fins for use as an emergency spin recovery device in aircraft
[NASA-CASE-LAR-10753-1] c08 N74-30421
- AIRCRAFT STABILITY**
- Mechanical stabilization system for VTOL aircraft
[NASA-CASE-XLA-06339] c02 N71-13422
- Development of aerodynamic control system to control flutter over large range of oscillatory frequencies using stability augmentation techniques
[NASA-CASE-LAR-10682-1] c02 N73-26004
- AIRCRAFT STRUCTURES**
- Fatigue testing device applying random discrete load levels to test specimen and applicable to aircraft structures
[NASA-CASE-XLA-02131] c32 N70-42003
- Heat flux sensor adapted for mounting on aircraft or spacecraft to measure aerodynamic heat flux inflow to aircraft skin
[NASA-CASE-XPR-03802] c33 N71-23085
- Three-axis adjustable loading structure
[NASA-CASE-FRC-10051-1] c35 N74-13129
- Transparent fire resistant polymeric structures
[NASA-CASE-ARC-10813-1] c27 N76-16230
- Wingtip vortex dissipator for aircraft
[NASA-CASE-LAR-11645-1] c02 N77-10001
- AIRCRAFT WAKES**
- Vortex attenuation method --- for multi-engine aircraft
[NASA-CASE-LAR-12034-1] c02 N77-22045
- AIRFOIL FENCES**
- Smokestack mounted airfoil
[NASA-CASE-LAR-11669-1] c34 N76-13419
- AIRFOILS**
- Electric analog for measuring induced drag on nonplanar airfoils
[NASA-CASE-XLA-00755] c01 N71-13470
- Electric analog for measuring induced drag on nonplanar airfoils
[NASA-CASE-XLA-05828] c01 N71-13411
- Miniature hydraulic actuator --- for control surfaces on airfoils
[NASA-CASE-LAR-11522-1] c34 N74-34881
- Flow separation detector
[NASA-CASE-ARC-11046-1] c35 N76-28535
- Surface finishing --- of metal airfoils by adhesive bonding
[NASA-CASE-MSC-12631-2] c05 N77-31131
- AIRFRAMES**
- Design of dual fuselage aircraft with pivoting wing and horizontal stabilizer to permit yawing of wing in flight for high speed operation
[NASA-CASE-ARC-10470-1] c02 N73-26005
- AIRSPERD**
- Aerodynamic configuration for aircraft capable of high speed flight and low drag for low speed takeoff or landing upon presently existing airfields
[NASA-CASE-XLA-00806] c02 N70-34858
- ALCOHOLS**
- New trifunctional alcohol derived from trimer acid and novel method of preparation
[NASA-CASE-NPO-10714] c06 N69-31244
- Cooling and radiation protection of ruby lasers using copper sulfate solution in alcohol
[NASA-CASE-MFS-20180] c16 N72-12440
- ALDEHYDES**
- Direct synthesis of polymeric schiff bases from two amines and two aldehydes
[NASA-CASE-XMF-08655] c06 N71-11239
- Synthesis of azine polymers for heat shields by azine-aromatic aldehyde reaction
[NASA-CASE-XMF-08656] c06 N71-11242
- Synthesis of aromatic diamines and dialdehyde polymers using Schiff base
[NASA-CASE-XMF-03074] c06 N71-24740
- ALIGNMENT**
- Centering device with ultrafine adjustment for use with roundness measuring apparatus
[NASA-CASE-XMF-00480] c14 N70-39898
- Portable device for aligning surfaces of two adjacent wall or sheet sections for joining at point of junction
[NASA-CASE-XMF-01452] c15 N70-41371
- Electro-optical/computer system for aligning large structural members and maintaining correct position
[NASA-CASE-XNP-02029] c14 N70-41955
- Electrical and electromechanical trigonometric computation assembly and space vehicle guidance system for aligning perpendicular axes of two sets of three-axes coordinate references
[NASA-CASE-XMF-00684] c21 N71-21688
- Description of device for aligning stacked sheets of paper for repetitive cutting
[NASA-CASE-XMS-04178] c15 N71-22798
- Laser beam projector for continuous, precise alignment between target, laser generator, and astronomical telescope during tracking
[NASA-CASE-MPO-11087] c23 N71-29125
- Measuring roll alignment of test body with respect to reference body
[NASA-CASE-GSC-10514-1] c14 N72-20379
- Design of precision vertical alignment system using laser with gravitationally sensitive

cavity
[NASA-CASE-ARC-10444-1] c16 N73-33397
Spacecraft docking and alignment system ---
using television camera system
[NASA-CASE-MSC-12559-1] c18 N76-14186
Method of constructing dished ion thruster grids
to provide hole array spacing compensation
[NASA-CASE-LEW-11876-1] c20 N76-21276
Optical alignment device
[NASA-CASE-ARC-10932-1] c74 N76-22993
Precision alignment apparatus for cutting a
workpiece
[NASA-CASE-LAR-11658-1] c37 N77-14478
Guide for a typewriter
[NASA-CASE-MFS-15218-1] c37 N77-19457

ALKALI METALS
Ultraviolet radiation resistant alkali-metal
silicate coatings for temperature control of
spacecraft
[NASA-CASE-XGS-04119] c18 N69-39979
Analytical test apparatus and method for
determining oxygen content in alkali liquid
metal
[NASA-CASE-XLE-01997] c06 N71-23527
Composition and production method of alkali
metal silicate paint with ultraviolet
reflection properties
[NASA-CASE-XGS-04799] c18 N71-24183
Design and characteristics of heat activated
electric cell with anode made from one or more
alkali metals and cathode made from oxidizing
material
[NASA-CASE-LEW-11358] c03 N71-26084
Method for producing alkali metal dispersions of
high purity
[NASA-CASE-XNP-08876] c17 N73-28573
Process for preparing higher oxides of the
alkali and alkaline earth metals --- using
radio frequency discharge sustained in oxygen
[NASA-CASE-ARC-10992-1] c25 N77-17178

ALKALINE BATTERIES
Method for determining state of charge of alkali
batteries by using tritium as tracer
[NASA-CASE-XNP-01464] c03 N71-10728
Alkaline-type coulometer cell for primary charge
control in secondary battery recharge circuits
[NASA-CASE-XGS-05434] c03 N71-20491
Flexible formulated plastic separators for
alkaline batteries
[NASA-CASE-LEW-12363-1] c44 N76-19552
Inorganic-organic battery separator for alkaline
batteries
[NASA-CASE-LEW-12649-1] c44 N76-31674

ALKALINE EARTH OXIDES
Process for preparing higher oxides of the
alkali and alkaline earth metals --- using
radio frequency discharge sustained in oxygen
[NASA-CASE-ARC-10992-1] c25 N77-17178

ALKYL COMPOUNDS
Preparation of fluorohydroxy ethers by reacting
fluoroalkylene oxides with alkali salt of
polyfluoroalkylene diol
[NASA-CASE-MFS-10507] c06 N73-30101

ALLOYS
Brazing alloy adapted for brazing corrosion
resistant steel to refractory metals, also for
brazing refractory metals to other refractory
metals
[NASA-CASE-XNP-03063] c17 N71-23365
Metal alloy bearing materials for space
applications
[NASA-CASE-XLE-05033] c15 N71-23810
High thermal emittance black surface coatings
and process for applying to metal and metal
alloy surfaces used in radiative cooling of
spacecraft
[NASA-CASE-XLA-06199] c15 N71-24875
Adjustable rigid mount for trihedral mirror
formed of alloy with small coefficient of
thermal expansion supporting screws and
spring-biased plates
[NASA-CASE-XNP-08907] c23 N71-29123
Two-step diffusion welding process of
unrecrystallized alloys
[NASA-CASE-LEW-11388-1] c15 N73-32358
Brazing alloy binder
[NASA-CASE-XNP-05868] c26 N75-27125
Brazing alloy
[NASA-CASE-XNP-03878] c26 N75-27127

ALPHANUMERIC CHARACTERS

X-Y alphanumeric character generator for
oscilloscopes
[NASA-CASE-GSC-11582-1] c33 N75-19517

ALTERNATING CURRENT

Characteristics of high power, low distortion,
alternating current power amplifier
[NASA-CASE-LAR-10218-1] c09 N70-34559
Frequency control network for current feedback
oscillators converting dc voltage to ac or
higher dc voltages
[NASA-CASE-GSC-10041-1] c10 N71-19418
Blood pressure measuring system for separately
recording dc and ac pressure signals of
Korotkoff sounds
[NASA-CASE-XMS-06061] c05 N71-23317
Solid state circuit for switching alternating
current input signal as function of direct
current gating transistor
[NASA-CASE-XNP-06505] c10 N71-24799
Device for voltage conversion using controlled
pulse widths and arrangements to generate ac
output voltage
[NASA-CASE-MFS-10068] c10 N71-25139
Inverters for changing direct current to
alternating current
[NASA-CASE-XGS-06226] c10 N71-25950
Dc to ac to dc converter with transistor driven
synchronous rectifiers
[NASA-CASE-GSC-11126-1] c09 N72-25253
Phase protection system for ac power lines
[NASA-CASE-MSC-17832-1] c33 N74-14956
Power factor control system for ac induction
motors
[NASA-CASE-MFS-23280-1] c33 N76-28471

ALTITUDE

Combined optical attitude and altitude
indicating instrument for use in aircraft or
spacecraft
[NASA-CASE-XLA-01907] c14 N71-23268

ALTITUDE CONTROL

Ambient atmospheric pressure sensing device for
determining altitude of flight vehicles
[NASA-CASE-XLA-00128] c15 N70-37925

ALUMINUM

Joining aluminum to stainless steel by bonding
aluminum coatings onto titanium coated
stainless steel and brazing aluminum to
aluminum/titanium coated steel
[NASA-CASE-MFS-07369] c15 N71-20443
Low concentration alkaline solution treatment of
aluminum with metal phosphate surface coatings
to improve chemical bonding and reduce coating
weight
[NASA-CASE-XLA-01995] c18 N71-23047
Etching aluminum alloys with aqueous solution
containing sulfuric acid, hydrofluoric acid,
and an alkali metal dischromate for adhesive
bonding
[NASA-CASE-XNP-02303] c17 N71-23828
Process for producing dispersion strengthened
nickel with aluminum comprising metallic
matrices embedded with oxides or other
hyperfine compounds
[NASA-CASE-XLE-06969] c17 N71-24142
Nickel plating onto etched aluminum castings
[NASA-CASE-XNP-04148] c17 N71-24830
Method of plating copper on aluminum to permit
conventional soldering of structural aluminum
bodies
[NASA-CASE-XLA-08966-1] c17 N71-25903
Heat activated emf cells with aluminum anode
[NASA-CASE-LEW-11359] c03 N71-28579
Heat activated cell with aluminum anode
[NASA-CASE-LEW-11359-2] c03 N72-20034
Method of preparing graphite reinforced aluminum
composite
[NASA-CASE-MFS-21077-1] c24 N75-28135
Method of fluxless brazing and diffusion bonding
of aluminum containing components
[NASA-CASE-MSC-14435-1] c37 N76-18455
Aluminum or copper substrate panel for selective
absorption of solar energy and the method of
producing said panel
[NASA-CASE-MFS-23518-1] c44 N77-31610

ALUMINUM ALLOYS
High strength aluminum casting alloy for
cryogenic applications in aerospace engineering
[NASA-CASE-XNP-02786] c17 N71-20743

- Etching aluminum alloys with aqueous solution containing sulfuric acid, hydrofluoric acid, and an alkali metal dischromate for adhesive bonding
[NASA-CASE-XNP-02303] c17 N71-23828
- Method of producing complex aluminum alloy parts of high temper, and products thereof
[NASA-CASE-NSC-19693-1] c26 N76-29401
- ALUMINUM COATINGS**
- Intermetallic chromium containing nickel aluminide for high temperature corrosion protection of stainless steels
[NASA-CASE-LEW-11267-1] c17 N73-32414
- Preparing oxidizer coated metal fuel particles
[NASA-CASE-NPO-11975-1] c28 N74-33209
- Method of protecting the surface of a substrate --- by applying aluminide coating
[NASA-CASE-LEW-11696-1] c37 N75-13261
- Duplex aluminized coatings
[NASA-CASE-LEW-11696-2] c26 N75-19408
- Meteoroid impact position locator aid for manned space station
[NASA-CASE-LAR-10629-1] c35 N75-33367
- ALUMINUM OXIDES**
- Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-1] c37 N75-15992
- ALUMINUM SILICATES**
- White paint production by heating impure aluminum silicate clay having low solar absorptance
[NASA-CASE-XNP-02139] c18 N71-24184
- AMINES**
- Direct synthesis of polymeric schiff bases from two amines and two aldehydes
[NASA-CASE-XNP-08655] c06 N71-11239
- Synthesis of schiff bases for heat shields by acetal amine reactions
[NASA-CASE-XNP-08652] c06 N71-11243
- Polyimide foam for the thermal insulation and fire protection
[NASA-CASE-ARC-10464-1] c27 N74-12812
- Automated analysis of oxidative metabolites
[NASA-CASE-ARC-10469-1] c25 N75-12086
- AMINO ACIDS**
- Amino acid analysis
[NASA-CASE-NFO-12130-1] c25 N75-14844
- AMMONIA**
- Solid state chemical source for ammonia beam masers
[NASA-CASE-XGS-01504] c16 N70-41578
- AMMONIUM PERCHLORATES**
- Ammonium perchlorate composite propellant with organic Cu/II/ chelate catalytic additive
[NASA-CASE-LAR-10173-1] c27 N71-14090
- AMPLIFICATION**
- Automatic measuring and recording of gain and zero drift characteristics of electronic amplifier
[NASA-CASE-XMS-05562-1] c09 N69-39986
- Clamped amplifier circuit for horizon scanner enabling amplification and accurate measurement of specified parameters
[NASA-CASE-XGS-01784] c10 N71-20782
- Diversity receiving system with diversity phase lock
[NASA-CASE-XGS-01222] c10 N71-20841
- Design of active RC network capable of operating at high Q values with reduced sensitivity to gain amplification and number of passive components
[NASA-CASE-ARC-10042-2] c10 N72-11256
- Amplifying circuit with constant current source for accumulator load and high gain voltage amplification
[NASA-CASE-NPO-11023] c09 N72-17155
- AMPLIFIER DESIGN**
- Automatic gain control amplifier system
[NASA-CASE-XMS-05307] c09 N69-24330
- Bio-isolated dc operational amplifier --- for bioelectric measurements
[NASA-CASE-ARC-10596-1] c33 N74-21851
- Dual mode solid state power switch
[NASA-CASE-MFS-22880-2] c33 N77-31407
- AMPLIFIERS**
- Development of stable electronic amplifier adaptable for monolithic and thin film construction
[NASA-CASE-XGS-02812] c09 N71-19466
- Ear oximeter for monitoring blood oxygenation and pressure, pulse rate, and pressure pulse curve, using dc and ac amplifiers
[NASA-CASE-IAC-05422] c04 N71-21185
- Comb type traveling wave maser amplifier for improved high gain broadband output
[NASA-CASE-NPO-10548] c16 N71-24831
- Vibrophonocardiograph comprising low weight and small volume piezoelectric microphone with amplifier having high input impedance for high sensitivity and low frequency response
[NASA-CASE-IFR-07172] c05 N71-27234
- Digital data handling circuits for pulse amplifiers
[NASA-CASE-XNP-01068] c10 N71-28739
- Active RC filter networks and amplifiers for deep space magnetic field measurement
[NASA-CASE-XAC-05462-2] c10 N72-17171
- Full wave modulator-demodulator amplifier apparatus --- for generating rectified output signal
[NASA-CASE-FRC-10072-1] c33 N74-14939
- Automatic focus control for facsimile cameras
[NASA-CASE-LAR-11213-1] c35 N75-15014
- Reflected-wave maser --- low noise amplifier
[NASA-CASE-NFO-13490-1] c36 N76-31512
- AMPLITUDE DISTRIBUTION ANALYSIS**
- Monitoring system for signal amplitude ranges over predetermined time interval
[NASA-CASE-XMS-04061-1] c09 N69-39885
- Cathode ray oscilloscope for analyzing electrical waveforms representing amplitude distribution of time function
[NASA-CASE-XNP-01383] c09 N71-10659
- Analog to digital converter circuit for pulse height analysis
[NASA-CASE-XNP-00477] c08 N73-28045
- AMPLITUDE MODULATION**
- Alternating current signal generator providing plurality of amplitude modulated output signals
[NASA-CASE-XNP-05612] c09 N69-21468
- Development of demodulation system for removing amplitude modulation from two quadrature displaced data bearing signals
[NASA-CASE-XAC-04030] c10 N71-19472
- Development of apparatus for amplitude modulation of diode laser by periodic discharge of direct current power supply
[NASA-CASE-XMS-04269] c16 N71-22895
- Vibrating element electrometer producing high conversion gain by input current control of elements resonant frequency displacement amplitude
[NASA-CASE-XAC-02807] c09 N71-23021
- Scanning signal phase and amplitude electronic control device with hybrid T waveguide junction
[NASA-CASE-NPO-10302] c10 N71-26142
- High efficiency transformerless amplitude modulator coupled to RF power amplifier
[NASA-CASE-GSC-10668-1] c07 N71-28430
- Gated compressor, distortionless signal limiter
[NASA-CASE-NPO-11820-1] c32 N74-19788
- Amplitude steered array
[NASA-CASE-GSC-11446-1] c33 N74-20860
- Stark-effect modulation of CO2 laser with NH2D
[NASA-CASE-NPO-11945-1] c36 N76-18427
- AMPLITUDES**
- Circuits for amplitude limiting of random noise inputs
[NASA-CASE-NPO-10169] c10 N71-24844
- ANALOG CIRCUITS**
- Electric network for monitoring temperatures, detecting critical temperatures, and indicating critical time duration
[NASA-CASE-XNP-01097] c10 N71-16058
- Automatic closed circuit television arc guidance control for welding joints
[NASA-CASE-MFS-13046] c07 N71-19433
- Electronic divider and multiplier for analog electric signals
[NASA-CASE-IFR-05637] c09 N71-19480
- Continuous Fourier transform method and apparatus --- for the analysis of simultaneous analog signal components
[NASA-CASE-ARC-10466-1] c60 N75-13539
- Electronic analog divider
[NASA-CASE-LEW-11881-1] c33 N77-11354
- ANALOG COMPUTERS**
- Analog spatial maneuver computer with three

ANALOG DATA

SUBJECT INDEX

- output angles for obtaining desired spatial attitude
[NASA-CASE-GSC-10880-1] c08 N72-11172
- ANALOG DATA**
- Data compression processor for monitoring analog signals by sampling procedure
[NASA-CASE-NPO-10068] c08 N71-19288
- Wide range analog data compression system
[NASA-CASE-XGS-02612] c08 N71-19435
- Analog signal to discrete time converter
[NASA-CASE-ERC-10048] c09 N72-25251
- Digital plus analog output encoder
[NASA-CASE-GSC-12115-1] c62 N76-31946
- Velocity measurement system
[NASA-CASE-NFS-23363-1] c35 N76-33469
- ANALOG SIMULATION**
- Apparatus for simulating optical transmission links
[NASA-CASE-GSC-11877-1] c74 N76-18913
- ANALOG TO DIGITAL CONVERTERS**
- Conversion system for increasing resolution of analog to digital converters
[NASA-CASE-XAC-00404] c08 N70-40125
- Analog to digital converter for converting pulses to frequencies
[NASA-CASE-XLA-00670] c08 N71-12501
- Describing continuous analog to digital converter with parallel digital output and nonlinear feedback
[NASA-CASE-XAC-04031] c08 N71-18594
- Voltage drift compensation circuit for analog-to-digital converter
[NASA-CASE-XNP-04780] c08 N71-19687
- Development and characteristics of fluid oscillator analog to digital converter with variable frequency controlled by signal passing through conditioning circuit
[NASA-CASE-LEW-10345-1] c10 N71-25899
- Data acquisition system for converting displayed analog signal to digital values
[NASA-CASE-NPO-10344] c10 N71-26544
- Apparatus for automatically testing analog to digital converters for open and short circuits
[NASA-CASE-XLA-06713] c14 N71-28991
- Wide range analog to digital converter with variable gain amplifier
[NASA-CASE-NPO-11018] c08 N72-21200
- Analog to digital converter using offset voltage to eliminate errors
[NASA-CASE-MSC-13110-1] c08 N72-22163
- Analog to digital converter analyzing system
[NASA-CASE-NPO-10560] c08 N72-22166
- Control and information system for digital telemetry data using analog converter to digitize sensed parameter values
[NASA-CASE-NPO-11016] c08 N72-31226
- Nonrecursive counting digital filter containing shift register
[NASA-CASE-NPO-11821-1] c08 N73-26175
- Analog to digital converter circuit for pulse height analysis
[NASA-CASE-XNP-00477] c08 N73-28045
- Analog to digital converter
[NASA-CASE-NPO-13385-1] c33 N76-18345
- Analog to digital converter for two-dimensional radiant energy array computers
[NASA-CASE-GSC-11839-3] c60 N77-32731
- ANALYZERS**
- Mixed liquid and vapor phase analyzer design with thermocouples for relative heat transfer measurement
[NASA-CASE-NPO-10691] c14 N71-26199
- Automated fluid chemical analyzer for microchemical analysis of small quantities of liquids by use of selected reagents and analyzer units
[NASA-CASE-XNP-09451] c06 N71-26754
- Micrometeoroid analyzer using arrays of interconnected capacitors and ion detector
[NASA-CASE-ARC-10443-1] c14 N73-20477
- NDIR gas analyzer based on absorption modulation ratios for known and unknown samples
[NASA-CASE-ARC-10802-1] c35 N75-30502
- Cosmic dust analyzer
[NASA-CASE-MSC-13802-2] c35 N76-15431
- ANEMOMETERS**
- Anemometer with braking mechanism to prevent rotation of wind driven elements
[NASA-CASE-XNP-05224] c14 N71-23726
- Maxometers for measuring peak wind speeds during severe environmental conditions
[NASA-CASE-NFS-20916] c14 N73-25460
- ANGIOGRAPHY**
- Contour detector and data acquisition system for the left ventricular outline
[NASA-CASE-ARC-10985-1] c52 N77-17701
- ANGLE OF ATTACK**
- Angle detector
[NASA-CASE-ARC-11036-1] c35 N77-11364
- ANGLES (GEOMETRY)**
- Gage for measuring internal angle of flare on end of tube
[NASA-CASE-XNP-04415] c14 N71-24693
- Optical device containing rotatable prism and reflecting mirror for generating precise angles
[NASA-CASE-XGS-04173] c19 N71-26674
- Rotating raster generator
[NASA-CASE-FRC-10071-1] c32 N74-20813
- ANGULAR ACCELERATION**
- Strain gage accelerometer for angular acceleration measurement
[NASA-CASE-XMS-05936] c14 N70-41682
- ANGULAR CORRELATION**
- Device for determining relative angular position of spacecraft and radiating celestial body
[NASA-CASE-GSC-11444-1] c14 N73-28490
- ANGULAR MOMENTUM**
- Stretch Yo-Yo mechanism for reducing initial spin rate of space vehicle
[NASA-CASE-XGS-00619] c30 N70-40016
- ANGULAR RESOLUTION**
- Characteristics and performance of electrical system to determine angular rotation
[NASA-CASE-XNP-00447] c14 N70-33179
- ANGULAR VELOCITY**
- Describing angular position and velocity sensing apparatus
[NASA-CASE-XGS-05680] c14 N71-17585
- ANHYDRIDES**
- Perfluoro alkylene dioxy-bis-(4-phthalic anhydrides and oxy-bis-(perfluoroalkyleneoxyphthalic anhydrides
[NASA-CASE-NFS-22356-1] c23 N75-30256
- ANILINE**
- Synthesis of high purity dianilinosilanes
[NASA-CASE-XNP-06409] c06 N71-23230
- ANIMALS**
- Automatic real-time pair-feeding system for animals
[NASA-CASE-ARC-10302-1] c51 N74-15778
- Tread drum for animals
[NASA-CASE-ARC-10917-1] c37 N76-20485
- ANISOTROPIC MEDIA**
- Hybrid composite laminate structures
[NASA-CASE-LEW-12118-1] c24 N77-27188
- ANNEALING**
- Recovering efficiency of solar cells damaged by environmental radiation through thermal annealing
[NASA-CASE-XGS-04047-2] c03 N72-11062
- ANNULAR NOZZLES**
- Large area-ratio nozzles for rocket motor thrust chambers
[NASA-CASE-XLE-00145] c28 N70-36806
- Electrostatic microthrust propulsion system with annular slit colloid thruster
[NASA-CASE-GSC-10709-1] c28 N71-25213
- ANNULAR PLATES**
- Bluff-shaped annular configuration for supersonic decelerator for reentry vehicles
[NASA-CASE-XLE-00222] c02 N70-37939
- ANODES**
- Design and characteristics of heat activated electric cell with anode made from one or more alkali metals and cathode made from oxidizing material
[NASA-CASE-LEW-11358] c03 N71-26084
- Storage battery comprising negative plates of a wedge shaped configuration --- for preventing shape change induced malfunctions
[NASA-CASE-NPO-11806-1] c44 N74-19693
- Resistive anode image converter
[NASA-CASE-HQN-10876-1] c33 N76-27473
- Rechargeable battery which combats shape change of the zinc anode
[NASA-CASE-HQN-10862-1] c44 N76-29699

- Arc control in compact arc lamps
[NASA-CASE-NPO-10870-1] c33 N77-22386
- ANODIC COATINGS**
Anodizing method for providing metal surfaces with temperature reducing coatings against flames
[NASA-CASE-XLE-00035] c33 N71-29151
Anode for ion thruster
[NASA-CASE-LEW-12048-1] c20 N77-20162
- ANTENNA ARRAYS**
Monopole antenna system for maximum omnidirectional efficiency for use on satellites
[NASA-CASE-XLA-00414] c07 N70-38200
Radio receiver with array of independently steerable antennas for deep space communication
[NASA-CASE-XLA-00901] c07 N71-10775
Characteristics of antenna horn feeds consisting of central horn with overlapping peripheral horns
[NASA-CASE-GSC-10452] c07 N71-12396
Tracking antenna system with array for synchronous satellite or ground based radar
[NASA-CASE-GSC-10553-1] c07 N71-19854
Interferometric tuning acquisition and tracking radar antenna system
[NASA-CASE-XNS-09610] c07 N71-24625
Development of electronic circuit for combining input signals on two separate antennas to form two processed signals
[NASA-CASE-MSC-12205-1] c07 N71-27056
Antenna array at focal plane of reflector with coupling network for beam switching
[NASA-CASE-GSC-10220-1] c07 N71-27233
Pattern and impedance matching improvements in transversely polarized triaxial antenna
[NASA-CASE-IGS-02290] c07 N71-28809
Planar array circularly polarized antenna with wall slot excitation
[NASA-CASE-NPO-10301] c07 N72-11148
Vertically stacked collinear array of independently fed omnidirectional antennas for use in collision warning systems on commercial aircraft
[NASA-CASE-LAR-10545-1] c09 N72-21244
Circularly polarized antenna with linearly polarized pair of elements
[NASA-CASE-ERC-10214] c09 N72-31235
Development of phase control coupling for use with phased array antenna
[NASA-CASE-ERC-10285] c10 N73-16206
Plural beam antenna with parabolic reflectors
[NASA-CASE-GSC-11013-1] c09 N73-19234
Amplitude steered array
[NASA-CASE-GSC-11446-1] c33 N74-20860
Position determination systems --- using orbital antenna scan of celestial bodies
[NASA-CASE-MSC-12593-1] c17 N76-21250
Thin conformal antenna array for microwave power conversion
[NASA-CASE-NPO-13886-1] c32 N77-11269
Phase array antenna control
[NASA-CASE-MSC-14939-1] c33 N77-19320
Phase conjugation method and apparatus for an active retrodirective antenna array
[NASA-CASE-NPO-13641-1] c32 N77-24340
- ANTENNA COMPONENTS**
Digital servo controller --- for rotating antenna shaft
[NASA-CASE-KSC-10769-1] c33 N74-29556
- ANTENNA DESIGN**
Development and characteristics of low-noise multimode monopulse antenna feed system for use with microwave communication equipment
[NASA-CASE-INP-01735] c07 N71-22750
Nose cone mounted heat resistant antenna comprising plurality of adjacent layers of silica not introducing paths of high thermal conductivity through ablative shield
[NASA-CASE-XMS-04312] c07 N71-22984
Development of electronic circuit for combining input signals on two separate antennas to form two processed signals
[NASA-CASE-MSC-12205-1] c07 N71-27056
Development and characteristics of extensible dipole antenna using deformable tubular metallic strip element
[NASA-CASE-HQH-00937] c07 N71-28979
Development of method for suppressing excitation of electromagnetic surface waves on dielectric converter antenna
[NASA-CASE-XLA-10772] c07 N71-28980
Target acquisition antenna feed with reflector system
[NASA-CASE-GSC-10064-1] c10 N72-22235
Collapsible high gain antenna which can be automatically expanded to operating state
[NASA-CASE-KSC-10392] c07 N73-26117
Dish antenna having switchable beamwidth --- with truncated concave ellipsoid subreflector
[NASA-CASE-GSC-11760-1] c33 N75-19516
Horn antenna having V-shaped corrugated slots
[NASA-CASE-LAR-11112-1] c32 N76-15330
Highly efficient antenna system using a corrugated horn and scanning hyperbolic reflector
[NASA-CASE-NPO-13568-1] c32 N76-21365
Furlable antenna --- antenna design
[NASA-CASE-NPO-13553-1] c33 N76-32457
Dual frequency circularly polarized microwave integrated antenna
[NASA-CASE-MSC-16100-1] c32 N77-15233
- ANTENNA FEEDS**
Design and operation of multi-feed cone Cassegrain antenna
[NASA-CASE-NPO-10539] c07 N71-11285
Characteristics of antenna horn feeds consisting of central horn with overlapping peripheral horns
[NASA-CASE-GSC-10452] c07 N71-12396
Target acquisition antenna feed with reflector system
[NASA-CASE-GSC-10064-1] c10 N72-22235
Multimode antenna feed system for microwave and broadband communication
[NASA-CASE-GSC-11046-1] c07 N73-28013
Low loss dichroic plate
[NASA-CASE-NPO-13171-1] c32 N74-11000
High efficiency multifrequency feed
[NASA-CASE-GSC-11909] c32 N74-20863
Single frequency, two feed dish antenna having switchable beamwidth
[NASA-CASE-GSC-11968-1] c32 N76-15329
Reflex feed system for dual frequency antenna
[NASA-CASE-NPO-14022-1] c32 N77-24338
- ANTENNA RADIATION PATTERNS**
Broadband chokes and absorbers to reduce spurious radiation patterns of antenna array caused by support structures
[NASA-CASE-XNS-05303] c07 N69-27462
Multiple mode horn antenna with radiation pattern of equal beamwidths and suppressed sidelobes
[NASA-CASE-XNP-01057] c07 N71-15907
Monopulse scanning network for scanning volumetric antenna pattern
[NASA-CASE-GSC-10299-1] c09 N71-24804
High impact antennas with high radiating efficiency
[NASA-CASE-NPO-10231] c07 N71-26101
Pattern and impedance matching improvements in transversely polarized triaxial antenna
[NASA-CASE-IGS-02290] c07 N71-28809
Dielectric loaded aperture antenna with directive radiation pattern from waveguide
[NASA-CASE-LAR-11084-1] c09 N73-12216
System for locating lightning strokes by coordination of directional antenna signals
[NASA-CASE-KSC-10729-1] c09 N73-32110
Highly efficient antenna system using a corrugated horn and scanning hyperbolic reflector
[NASA-CASE-NPO-13568-1] c32 N76-21365
Dual frequency circularly polarized microwave integrated antenna
[NASA-CASE-MSC-16100-1] c32 N77-15233
- ANTENNAS**
Antenna design with self erecting mesh reflector
[NASA-CASE-IGS-09190] c31 N71-16102
High impact antennas with high radiating efficiency
[NASA-CASE-NPO-10231] c07 N71-26101
Collapsible antenna boom and coaxial transmission line having inflatable inner tube
[NASA-CASE-NPS-20068] c07 N71-27191
Conical reflector antenna with feed approximating line source
[NASA-CASE-NPO-10303] c07 N72-22127

ANTIFRICTION BEARINGS

- Development of hybrid bearing lubrication system with combination of standard type lubrication and magnetic flux field for earth atmosphere and space environment operation
[NASA-CASE-XNP-01641] c15 N71-22997
- Development of rolling element bearing for operation in ultrahigh vacuum environment
[NASA-CASE-XLE-09527-2] c15 N71-26189
- Development of optical system for detecting defective components in rotating machinery with emphasis on bearing assemblies
[NASA-CASE-KSC-10752-1] c15 N73-27407
- Fatigue life of hybrid antifriction bearings at ultrahigh speeds
[NASA-CASE-LEW-11152-1] c15 N73-32359
- Hollow high strength rolling elements for antifriction bearings fabricated from preformed components
[NASA-CASE-LEW-11026-1] c15 N73-33383

ANTI GRAVITY

- Anti-gravity device
[NASA-CASE-MFS-22758-1] c70 N75-26789

ANTIINFECTIVES AND ANTIBACTERIALS

- Determination of antimicrobial susceptibilities of infected urines without isolation
[NASA-CASE-GSC-12046-1] c52 N77-26797

ANTIREFLECTION COATINGS

- Silicon nitride coated, plastic covered solar cell
[NASA-CASE-LEW-11496-1] c44 N77-14580

ANVILS

- Exponential horn, copper plate, magnetic hammer, and anvil in apparatus for making diamonds
[NASA-CASE-MFS-20698] c15 N72-20446

APERTURES

- Apertured electrode focusing system for ion sources with nonuniform plasma density
[NASA-CASE-XNP-03332] c09 N71-10618
- Threadless fastener apparatus comprising receiving apertures for plurality of articles, self-locked condition, and capable of using nonmalleable materials in both ends
[NASA-CASE-XFR-05302] c15 N71-23254
- Apparatus for on-film optical recording of camera lens aperture and focus setting
[NASA-CASE-MSC-12363-1] c14 N73-26431
- Method of forming aperture plate for electron microscope
[NASA-CASE-ARC-10448-2] c74 N75-12732
- Method of making an apertured casting --- using duplicate mold
[NASA-CASE-LEW-11169-1] c37 N76-23570
- Electron microscope aperture system
[NASA-CASE-ARC-10448-3] c35 N77-14408

APOLLO PROJECT

- Intra- and extravehicular life support space suite for Apollo astronauts
[NASA-CASE-MSC-12609-1] c05 N73-32012

APOLLO SPACECRAFT

- Low onset rate energy absorber in form of strut assembly for crew couch of Apollo command module
[NASA-CASE-MSC-12279-1] c15 N70-35679
- Energy absorbing crew couch strut for Apollo command module
[NASA-CASE-MSC-12279] c15 N72-17450

APPLICATIONS OF MATHEMATICS

- Apparatus for computing square roots
[NASA-CASE-XGS-04768] c08 N71-19437

APPROACH INDICATORS

- Spectrally balanced chromatic landing approach lighting system
[NASA-CASE-ARC-10990-1] c04 N77-12031

AQUEOUS SOLUTIONS

- Fuel system for thermal nuclear reactor which uses inorganic ion exchanger
[NASA-CASE-LEW-11645-2] c22 N73-28660
- Anti-fog composition --- for prevention of fogging on surfaces such as space helmet visors and windshields
[NASA-CASE-MSC-13530-2] c23 N75-14834
- Automated system for identifying traces of organic chemical compounds in aqueous solutions
[NASA-CASE-NPO-13063-1] c25 N76-18245

ARC DISCHARGES

- Development of device to prevent high voltage arcing in electron beam welding
[NASA-CASE-XNP-08522] c15 N71-19486
- Direct current powered self repeating plasma accelerator with interconnected annular and

- linear discharge channels
[NASA-CASE-XLA-03103] c25 N71-21693
- Method and apparatus for nondestructive testing --- using high frequency arc discharges
[NASA-CASE-MFS-21233-1] c38 N74-15395
- Sustained arc ignition system
[NASA-CASE-LEW-12444-1] c33 N77-28385

ARC HEATING

- Magnetically diffused radial electric arc heater
[NASA-CASE-XLA-00330] c33 N70-34540
- Electric arc device for minimizing electrode ablation and heating gases to supersonic or hypersonic wind tunnel temperatures
[NASA-CASE-XAC-00319] c25 N70-41628
- Annular arc accelerator shock tube
[NASA-CASE-NPO-13528-1] c09 N77-10071

ARC JET ENGINES

- Improving performance of magnetoplasmadynamic arc rocket engine
[NASA-CASE-LEW-11180-1] c25 N73-25760

ARC LAMPS

- Starting circuit design for initiating and maintaining arcs in vapor lamps
[NASA-CASE-XNP-01058] c09 N71-12540
- Compact, high intensity arc lamp with internal magnetic field producing means
[NASA-CASE-NPO-11510-1] c33 N77-21315
- Depressurization of arc lamps
[NASA-CASE-NPO-10790-1] c33 N77-21316
- Arc control in compact arc lamps
[NASA-CASE-NPO-10870-1] c33 N77-22386

ARC WELDING

- Emission spectroscopy method for contamination monitoring of inert gas metal arc welding
[NASA-CASE-XNP-02039] c15 N71-15871
- Automatic closed circuit television arc guidance control for welding joints
[NASA-CASE-MFS-13046] c07 N71-19433
- Development of device to prevent high voltage arcing in electron beam welding
[NASA-CASE-XNP-08522] c15 N71-19486
- Development of apparatus for automatically changing carriage speed of welding machine to obtain constant speed of torch along work surface
[NASA-CASE-XNP-07069] c15 N71-23815
- Grain refinement control in TIG arc welding
[NASA-CASE-MSC-19095-1] c37 N75-19683

ARCHITECTURE

- Development of construction block in form of container folded from flat sheet and filled with solid material for architectural purposes
[NASA-CASE-MSC-12233-2] c32 N73-13921

ARM (ANATOMY)

- Apparatus for applying simulator g-forces to an arm of an aircraft simulator pilot
[NASA-CASE-LAR-10550-1] c09 N74-30597
- Orthotic arm joint --- for use in mechanical arms
[NASA-CASE-MFS-21611-1] c54 N75-12616
- An improved controller arm for a remotely related slave arm
[NASA-CASE-ARC-11052-1] c54 N77-30751

ARMATURES

- Design and development of electric motor with stationary field and armature windings which operates on direct current
[NASA-CASE-XGS-05290] c09 N71-25999
- Solenoid valve including guide for armature and valve member
[NASA-CASE-GSC-10607-1] c15 N72-20442
- Direct current motor including stationary field windings and stationary armature winding
[NASA-CASE-XGS-07805] c15 N72-33476

AROMATIC COMPOUNDS

- Aromatic polyimide preparation --- with low softening temperatures
[NASA-CASE-LAR-11372-1] c27 N74-19772
- Ultraviolet and thermally stable polymer compositions
[NASA-CASE-ARC-10592-1] c27 N74-21156
- A method of preparing aromatic polyimides having uniquely low softening temperatures
[NASA-CASE-LAB-11828-1] c23 N75-29181
- Ultraviolet and thermally stable polymer compositions
[NASA-CASE-ARC-10592-2] c27 N76-32315

ARTERIES

- Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] c52 N74-27566

ARTIFICIAL CLOUDS

Chemical system for releasing barium to create ion clouds in upper atmosphere and interplanetary space
[NASA-CASE-LAR-10670-1] c06 N73-30097

ARTIFICIAL GRAVITY

Artificial gravity system for simulating self-locomotion capability of astronauts in rotating environments
[NASA-CASE-XLA-03127] c11 N71-10776
Development of method for producing artificial gravity in manned spacecraft
[NASA-CASE-XNP-02595] c31 N71-21881
Spacecraft with artificial gravity and earthlike atmosphere
[NASA-CASE-LEW-11101-1] c31 N73-32750

ARTIFICIAL SATELLITES

Gravity gradient attitude control system with gravity gradiometer and reaction wheels for artificial satellite attitude control
[NASA-CASE-GSC-10555-1] c21 N71-27324

ASBESTOS

Reconstituted asbestos matrix --- for use in fuel or electrolysis cells
[NASA-CASE-HSC-12568-1] c24 N76-14204

ASPECT RATIO

Variable aspect ratio and variable sweep delta wing planforms for supersonic aircraft
[NASA-CASE-XLA-00221] c02 N70-33266
Supersonic aircraft configuration providing for variable aspect ratio and variable sweep wings
[NASA-CASE-XLA-00166] c02 N70-34178
Supersonic aircraft variable sweep wing planform for varying aspect ratio
[NASA-CASE-XLA-00350] c02 N70-38011

ASSEMBLIES

Multiple Belleville spring assembly with even load distribution
[NASA-CASE-XNP-00840] c15 N70-38225
Bearing seat usable in a gas turbine engine
[NASA-CASE-LEW-12477-1] c37 N77-32501

ASSEMBLING

Apparatus for assembling space structure
[NASA-CASE-HFS-23579-1] c12 N77-31213

ASTRONAUT LOCOMOTION

Artificial gravity system for simulating self-locomotion capability of astronauts in rotating environments
[NASA-CASE-XLA-03127] c11 N71-10776
Space suit with pressure-volume compensator system
[NASA-CASE-XLA-05332] c05 N71-11194
Equipotential space suits utilizing mechanical aids to minimize astronaut energy at bending joints
[NASA-CASE-LAR-10007-1] c05 N71-11195
Space suit using nonflexible material with low leakage and providing protection against thermal extremes, physical punctures, and radiation with high mobility articulation
[NASA-CASE-XAC-07043] c05 N71-23161
Development of improved convolute section for pressurized suits to provide high degree of mobility in response to minimum of applied torque
[NASA-CASE-XMS-09637-1] c05 N71-24730
Gravity environment simulation by locomotion and restraint aid for studying manual operation performance of astronauts at zero gravity
[NASA-CASE-ARC-10153] c05 N71-28619
A walking boot assembly
[NASA-CASE-ARC-11101-1] c54 N77-14742

ASTRONAUT MANEUVERING EQUIPMENT

Hand-held maneuvering unit for propulsion and attitude control of astronauts in zero or reduced gravity environment
[NASA-CASE-XMS-05304] c05 N71-12336
Space environmental work simulator with portions of space suit mounted to vacuum chamber wall
[NASA-CASE-XNP-07488] c11 N71-18773
Lightweight propulsion unit for movement of personnel and equipment across lunar surface
[NASA-CASE-HFS-20130] c28 N71-27585

ASTRONAUT PERFORMANCE

Gravity environment simulation by locomotion and restraint aid for studying manual operation performance of astronauts at zero gravity
[NASA-CASE-ARC-10153] c05 N71-28619
Spacesuit mobility joints
[NASA-CASE-ARC-11058-1] c54 N77-15641

ASTRONAUT TRAINING

Attitude control training device for astronauts permitting friction-free movement with five degrees of freedom
[NASA-CASE-XMS-02977] c11 N71-10746
Low and zero gravity simulator for astronaut training
[NASA-CASE-HFS-10555] c11 N71-19494
Apparatus for training astronaut crews to perform on simulated lunar surface under conditions of lunar gravity
[NASA-CASE-XMS-04798] c11 N71-21474

ASTRONAUTS

Three transceiver lunar emergency system to relay voice communication of astronaut
[NASA-CASE-HFS-21042] c07 N72-25171
Manual actuator --- for spacecraft exercising machines
[NASA-CASE-HFS-21481-1] c37 N74-18127

ASTRONAVIGATION

Guidance analyzer having suspended spacecraft simulating sphere for astronavigation
[NASA-CASE-XNP-09572] c14 N71-15621

ASTRONOMICAL PHOTOGRAPHY

Cameras for photographing meteors in selected sky area
[NASA-CASE-LAR-10226-1] c14 N73-19419

ASTRONOMICAL TELESCOPES

Light sensitive control system for automatically opening and closing dome of solar optical telescope
[NASA-CASE-MSC-10966] c14 N71-19568
Laser beam projector for continuous, precise alignment between target, laser generator, and astronomical telescope during tracking
[NASA-CASE-NPO-11087] c23 N71-29125
Star image motion compensator using telescope for maintaining fixed images
[NASA-CASE-LAR-10523-1] c14 N72-22444
System for the measurement of ultra-low stray light levels --- light shields and baffles
[NASA-CASE-HFS-23513-1] c74 N77-14842
Partial polarizer filter
[NASA-CASE-GSC-12225-1] c74 N77-30935

ATMOSPHERIC COMPOSITION

Design and development of two types of atmosphere sampling chambers
[NASA-CASE-NFO-11373] c13 N72-25323
Development and operation of apparatus for sampling particulates in gases in upper atmosphere
[NASA-CASE-HQN-10037-1] c14 N73-27376
Monitoring atmospheric pollutants with a heterodyne radiometer transmitter-receiver
[NASA-CASE-NFO-11919-1] c35 N74-11284

ATMOSPHERIC ENTRY

Designing spacecraft for flight into space, atmospheric reentry, and landing at selected sites
[NASA-CASE-IAC-02058] c02 N71-16087
Development of method for measuring electron density gradients of plasma sheath around space vehicle during atmospheric entry
[NASA-CASE-XLA-06232] c25 N71-20563
Orbital and entry tracking accessory for globes --- to provide range requirements for reentry vehicles to any landing site
[NASA-CASE-LAR-10626-1] c19 N74-21015

ATMOSPHERIC ENTRY SIMULATION

Crossed-field plasma accelerator for laboratory simulation of atmospheric reentry conditions
[NASA-CASE-XLA-00675] c25 N70-33267
Wind tunnel method for simulating flow fields around blunt vehicles entering planetary atmospheres without involving high temperatures
[NASA-CASE-LAR-11138] c12 N71-20436

ATMOSPHERIC PHYSICS

Development and characteristics of apparatus for measuring intensity of electric field in atmosphere
[NASA-CASE-RSC-10730-1] c14 N73-32318

ATMOSPHERIC RADIATION

Radiometric measuring system for solar activity and atmospheric attenuation and emission
[NASA-CASE-ERC-10276] c14 N73-26432

ATMOSPHERIC SCATTERING

Clear air turbulence detector
[NASA-CASE-HFS-21244-1] c36 N75-15028

ATMOSPHERIC TURBULENCE

Passive optical wind and turbulence remote detection system
[NASA-CASE-XMF-14032] c20 N71-16340

Focused laser Doppler velocimeter
[NASA-CASE-MPS-23178-1] c35 N77-10493

ATOMIZERS

Portable cryogenic cooling system design including turbine pump, cooling chamber, and atomizer
[NASA-CASE-WPO-10467] c23 N71-26654

ATS

Doppler frequency shift correction device for multiplex communication with Applications Technology Satellites
[NASA-CASE-XGS-02749] c07 N69-39978

ATTACHMENT

Silicon carbide backward diode with coated lead attachment
[NASA-CASE-ERC-10224-2] c09 N73-27150

ATTENUATORS

Rotary vane attenuator with two stators and intermediary rotor, using resistive and orthogonally disposed cards
[NASA-CASE-WPO-11418-1] c14 N73-13420

ATTITUDE (INCLINATION)

Analog spatial maneuver computer with three output angles for obtaining desired spatial attitude
[NASA-CASE-GSC-10880-1] c08 N72-11172

Spacecraft attitude sensing system design with narrow field of view sensor rotating about spacecraft x-y axis
[NASA-CASE-GSC-10890-1] c21 N73-30640

Interferometer mirror tilt correcting system
[NASA-CASE-WPO-13687-1] c35 N76-14433

ATTITUDE CONTROL

Visual target luminaires for retrofire attitude control
[NASA-CASE-XMS-12158-1] c31 N69-27499

Unitary three-axis controller for flight vehicles within or outside atmosphere
[NASA-CASE-IXP-00181] c21 N70-33279

Sensing method and device for determining orientation of space vehicle or satellite by using particle traps
[NASA-CASE-IGS-00466] c21 N70-34297

Attitude and propellant flow control system for liquid propellant rocket vehicles
[NASA-CASE-XMF-00185] c21 N70-34539

Spacecraft attitude control system using solar and earth sensors, gyroscopes, and jet actuators
[NASA-CASE-XMF-00465] c21 N70-35395

Attitude control device for space vehicles
[NASA-CASE-XMF-00294] c21 N70-36938

Attitude orientation control of spin stabilized final stage space vehicles, using horizon scanners
[NASA-CASE-XLA-00281] c21 N70-36943

Automatic ejection valve for attitude control and midcourse guidance of space vehicles
[NASA-CASE-XNP-00676] c15 N70-38996

Three-axis controller operated by hand-wrist motion for yaw, pitch, and roll control
[NASA-CASE-XAC-01404] c05 N70-41581

Attitude control training device for astronauts permitting friction-free movement with five degrees of freedom
[NASA-CASE-XMS-02977] c11 N71-10746

Photomultiplier detector of Canopus for spacecraft attitude control
[NASA-CASE-XNP-03914] c21 N71-10771

Automatic balancing device for use on frictionless supported attitude-controlled test platforms
[NASA-CASE-LPR-10774] c10 N71-13545

Development of spacecraft experiment pointing and attitude control system
[NASA-CASE-XLA-05464] c21 N71-14132

Development of attitude control system for spacecraft orientation
[NASA-CASE-XGS-04393] c21 N71-14159

System for aerodynamic control of rocket vehicles by secondary injection of fluid into nozzle exhaust stream
[NASA-CASE-XLA-01163] c21 N71-15582

Drive mechanism for operating reactance attitude control system for aerospace bodies
[NASA-CASE-XMF-01598] c21 N71-15583

Attitude detection system using stellar references for three-axis control and spin stabilized spacecraft
[NASA-CASE-XGS-03431] c21 N71-15642

Remote control device operated by movement of finger tips for manual control of spacecraft attitude
[NASA-CASE-XAC-02405] c09 N71-16089

Thrust and attitude control apparatus using jet nozzle in movable canard surface or fin configuration
[NASA-CASE-XLE-03583] c31 N71-17629

Attitude sensor with scanning mirrors for detecting orientation of space vehicle with respect to planet
[NASA-CASE-XLA-00793] c21 N71-22880

Development of attitude control system for sounding rocket stabilization during ballistic phase of flight
[NASA-CASE-IGS-01654] c31 N71-24750

Development of voice operated controller for controlling reaction jets of spacecraft
[NASA-CASE-XLA-04063] c31 N71-33160

Attitude sensor
[NASA-CASE-LAR-10586-1] c19 N74-15089

Temperature compensated digital inertial sensor --- circuit for maintaining inertial element of gyroscope or accelerometer at constant position
[NASA-CASE-WPO-1J044-1] c35 N74-15094

Thrust augmented spin recovery device
[NASA-CASE-LAR-11970-1] c08 N77-22147

Sun direction detection system
[NASA-CASE-WPO-13722-1] c74 N77-22951

ATTITUDE GYROS

Spacecraft attitude control system using solar and earth sensors, gyroscopes, and jet actuators
[NASA-CASE-XNP-00465] c21 N70-35395

Attitude control system
[NASA-CASE-MPS-22787-1] c15 N77-10113

ATTITUDE INDICATORS

Photosensitive light source device for detecting unmanned spacecraft deviation from reference attitude
[NASA-CASE-XNP-00438] c21 N70-35089

Hand controller operable about three respectively perpendicular axes and capable of actuating signal generators for attitude control devices
[NASA-CASE-XMS-07487] c15 N71-23255

Combined optical attitude and altitude indicating instrument for use in aircraft or spacecraft
[NASA-CASE-XLA-01907] c14 N71-23268

Aircraft horizon and vertical indicator
[NASA-CASE-ERC-10392] c21 N73-14692

Attitude sensor
[NASA-CASE-LAR-10586-1] c19 N74-15089

Translatory shock absorber for attitude sensors
[NASA-CASE-MPS-22905-1] c19 N76-22284

ATTITUDE STABILITY

Dynamic precession damping of spin-stabilized vehicles by using rate gyroscope and angular accelerometer
[NASA-CASE-XLA-01989] c21 N70-34295

Attitude stabilizer for nonguided missile or vehicle with respect to trajectory
[NASA-CASE-ARC-10134] c30 N72-17873

AUDIO EQUIPMENT

Audio equipment for removing impulse noise from audio signals
[NASA-CASE-WPO-11631] c10 N73-12244

AUDIO FREQUENCIES

High efficiency transformerless amplitude modulator coupled to RF power amplifier
[NASA-CASE-GSC-10668-1] c07 N71-28430

Audio frequency analysis circuit for determining, displaying, and recording frequency of sweeping audio frequency signal
[NASA-CASE-WPO-11147] c14 N72-27408

AUDITORY PERCEPTION

Auditory display for the blind
[NASA-CASE-HQN-10832-1] c71 N74-21014

AUDITORY SIGNALS

Audio signal processing system for noise surge elimination at low amplitude audio input
[NASA-CASE-HSC-12223-1] c07 N71-26181

Audio equipment for removing impulse noise from audio signals

SUBJECT INDEX

AUXILIARY POWER SOURCES

[NASA-CASE-WFO-11631] c10 N73-12244
AUDITORY STIMULI
 Auditory display for the blind
 [NASA-CASE-WON-10832-1] c71 N74-21014
AUSTENITIC STAINLESS STEELS
 Intermetallic chromium containing nickel
 aluminide for high temperature corrosion
 protection of stainless steels
 [NASA-CASE-LEW-11267-1] c17 N73-32414
 Device for measuring the ferrite content in an
 austenitic stainless-steel weld
 [NASA-CASE-HFS-22907-1] c26 N76-18257
 Reduced chromium stainless steel alloys
 [NASA-CASE-LEW-12543-1] c26 N77-21217
AUTOCORRELATION
 Linear three-tap feedback shift register
 [NASA-CASE-NPO-10351] c08 N71-12503
 Circuitry for developing autocorrelation
 function continuously within signal receiving
 period
 [NASA-CASE-XNP-00746] c07 N71-21476
AUTOMATIC CONTROL
 Automatic control of voltage supply to direct
 current motor
 [NASA-CASE-XMS-04215-1] c09 N69-39987
 Electro-optical/computer system for aligning
 large structural members and maintaining
 correct position
 [NASA-CASE-XNP-02029] c14 N70-41955
 Pulsed energy power system for application of
 combustible gases to turbine controlling ac
 voltage generator
 [NASA-CASE-MSC-13112] c03 N71-11057
 Automatic balancing device for use on
 frictionless supported attitude-controlled
 test platforms
 [NASA-CASE-LAR-10774] c10 N71-13545
 Computer controlled apparatus for maintaining
 welding torch angle and velocity during seam
 tracking
 [NASA-CASE-XMP-03287] c15 N71-15607
 Fluid leakage detection system with automatic
 monitoring capability
 [NASA-CASE-LAR-10323-1] c12 N71-17573
 Light sensitive control system for automatically
 opening and closing dome of solar optical
 telescope
 [NASA-CASE-MSC-10966] c14 N71-19568
 Welding torch with automatic speed controller
 using speed sensing wheel and closed servo
 system
 [NASA-CASE-XMP-01730] c15 N71-23050
 Microwave waveguide switch with rotor position
 control
 [NASA-CASE-XNP-06507] c09 N71-23548
 Automatically reciprocating, high pressure pump
 for use in spacecraft cryogenic propellants
 [NASA-CASE-XNP-04731] c15 N71-24042
 Automatic controlled thermal fatigue testing
 apparatus
 [NASA-CASE-XLA-02059] c33 N71-24276
 Automatically charging battery of electric
 storage cells
 [NASA-CASE-XNP-04758] c03 N71-24605
 Electric motor control system with pulse width
 modulation for providing automatic null
 seeking servo
 [NASA-CASE-XMP-05195] c10 N71-24861
 Indexing mechanism for cathode array
 substitution in electron beam tube
 [NASA-CASE-WFO-10625] c09 N71-26182
 Voltage range selection apparatus for sensing
 and applying voltages to electronic
 instruments without loading signal source
 [NASA-CASE-XMS-06497] c14 N71-26244
 Automated fluid chemical analyzer for
 microchemical analysis of small quantities of
 liquids by use of selected reagents and
 analyzer units
 [NASA-CASE-XNP-09451] c06 N71-26754
 Automatic control device for regulating inlet
 water temperature of liquid cooled spacesuit
 [NASA-CASE-MSC-13917-1] c05 N72-15098
 Optical control system for automatic speed
 regulation of electric driven motor vehicle
 [NASA-CASE-WFO-11210] c11 N72-20244
 Plotter device for automatically drawing
 equipotential lines on sheet of resistance paper
 [NASA-CASE-WFO-11134] c09 N72-21246

Automatic shunting of ion thruster magnetic
 field when thruster is not operating
 [NASA-CASE-LEW-10835-1] c28 N72-22771
 Automatic temperature control for liquid cooled
 space suit
 [NASA-CASE-ARC-10599-1] c05 N73-26071
 Speed control system for dc motor equipped with
 brushless Hall effect device
 [NASA-CASE-MFS-20207-1] c09 N73-32107
 Programmable physiological infusion
 [NASA-CASE-ARC-10447-1] c52 N74-22771
 Automatically operable self-leveling load table
 [NASA-CASE-MFS-22039-1] c09 N75-12968
 Automatic focus control for facsimile cameras
 [NASA-CASE-LAR-11213-1] c35 N75-15014
 Automatic fluid dispenser
 [NASA-CASE-ARC-10820-1] c54 N75-32766
 Traffic survey system --- using optical scanners
 [NASA-CASE-MFS-22631-1] c66 N76-19888
 Automotive gas turbine fuel control
 [NASA-CASE-LEW-12785-1] c37 N77-13426
 Method for producing solar energy panels by
 automation
 [NASA-CASE-LEW-12541-1] c44 N77-22615
AUTOMATIC CONTROL VALVES
 Ambient atmospheric pressure sensing device for
 determining altitude of flight vehicles
 [NASA-CASE-XLA-00128] c15 N70-37925
 Describing metal valve pintle with encapsulated
 elastomeric body
 [NASA-CASE-MSC-12116-1] c15 N71-17648
 Semitoroidal diaphragm cavitating flow control
 valve
 [NASA-CASE-XNP-09704] c12 N71-18615
 Reliability of automatic refilling valving
 device for cryogenic liquid systems
 [NASA-CASE-WFO-11177] c15 N72-17453
 Combined pressure regulator and shutoff valve
 [NASA-CASE-WFO-13201-1] c37 N75-15050
AUTOMATIC FREQUENCY CONTROL
 System for phase locking onto carrier frequency
 signal located within receiver bandpass
 [NASA-CASE-XGS-04994] c09 N69-21543
 Audio signal processing system for noise surge
 elimination at low amplitude audio input
 [NASA-CASE-MSC-12223-1] c07 N71-26181
 Automatic frequency control device for providing
 frequency reference for voltage controlled
 oscillator
 [NASA-CASE-RSC-10393] c09 N72-21247
 Self-tuning electronic filter for maintaining
 constant bandwidth and center frequency gain
 [NASA-CASE-ARC-10264-1] c09 N73-20231
AUTOMATIC GAIN CONTROL
 Automatic gain control amplifier system
 [NASA-CASE-XMS-05307] c09 N69-24330
 Automatic measuring and recording of gain and
 zero drift characteristics of electronic
 amplifier
 [NASA-CASE-XMS-05562-1] c09 N69-39986
 Self-tuning electronic filter for maintaining
 constant bandwidth and center frequency gain
 [NASA-CASE-ARC-10264-1] c09 N73-20231
AUTOMATIC TEST EQUIPMENT
 Automated visual sensitivity tester for
 determining visual field sensitivity and blind
 spot size
 [NASA-CASE-ARC-10329-1] c05 N73-26072
 Automatic microbial transfer device
 [NASA-CASE-LAR-11354-1] c35 N75-27330
 Visual examination apparatus
 [NASA-CASE-EE-ARC-10329-2] c52 N76-30793
 Automated clinical system for chromosome analysis
 [NASA-CASE-WFO-13913-1] c52 N77-19750
AUTOMATION
 Automated multi-level vehicle parking system
 [NASA-CASE-WFO-13058-1] c37 N77-22480
AUTOMOBILE FUELS
 Hydrogen rich gas generator
 [NASA-CASE-WFO-13342-2] c44 N76-29700
AUTORADIOGRAPHY
 Method of post-process intensification of images
 on photographic films and plates
 [NASA-CASE-MFS-23461-1] c35 N76-26449
AUXILIARY POWER SOURCES
 Auxiliary power system for activity cooled
 aircraft
 [NASA-CASE-LAR-11626-1] c34 N77-12332

AXES (REFERENCE LINES)

SUBJECT INDEX

AXES (REFERENCE LINES)

Test fixture for measuring moment of inertia of irregularly shaped body with multiple axes
[NASA-CASE-XGS-01023] c14 N71-22992

Mechanism for restraining universal joints to prevent separation while allowing bending, angulation, and lateral offset in any position about axis
[NASA-CASE-XNP-02278] c15 N71-28951

AXES OF ROTATION

Unitary three-axis controller for flight vehicles within or outside atmosphere
[NASA-CASE-XFR-00181] c21 N70-33279

Proportional controller for regulating aircraft or spacecraft motion about three axes
[NASA-CASE-XAC-03392] c03 N70-41954

Electrical and electromechanical trigonometric computation assembly and space vehicle guidance system for aligning perpendicular axes of two sets of three-axes coordinate references
[NASA-CASE-XMF-00684] c21 N71-21688

Hand controller operable about three respectively perpendicular axes and capable of actuating signal generators for attitude control devices
[NASA-CASE-XMS-07487] c15 N71-23255

AXIAL COMPRESSION LOADS

Development and characteristics of device for indicating and recording magnitude of force applied in axial direction
[NASA-CASE-XSC-15626-1] c14 N72-25411

AXIAL FLOW TURBINES

Multistage multiple reentry axial flow reaction turbine with reverse flow reentry ducting
[NASA-CASE-XLE-00170] c15 N70-36412

Multistage, multiple reentry, single rotor, axial flow turbine
[NASA-CASE-XLE-00085] c28 N70-39895

AXIAL LOADS

Ball locking device which releases in response to small forces when subjected to high axial loads
[NASA-CASE-XMF-01371] c15 N70-41829

Method for measuring biaxial stress in a body subjected to stress inducing loads
[NASA-CASE-MPS-23299-1] c39 N77-28511

AXIAL STRESS

Axially and radially controllable magnetic bearing
[NASA-CASE-XSC-11551-1] c37 N76-18459

Method for measuring biaxial stress in a body subjected to stress inducing loads
[NASA-CASE-MPS-23299-1] c39 N77-28511

AZIMUTH

Tracking mount for laser telescope employed in tracking large rockets and space vehicles to give information regarding azimuth and elevation
[NASA-CASE-MPS-14017] c14 N71-26627

Long range laser traversing system
[NASA-CASE-XSC-11262-1] c36 N74-21091

Magnetic heading reference
[NASA-CASE-LAR-11387-2] c04 N77-19056

AZINES

Synthesis of azine polymers for heat shields by azine-aromatic aldehyde reaction
[NASA-CASE-XMF-08656] c06 N71-11242

Ultraviolet and thermally stable polymer compositions
[NASA-CASE-ARC-10592-1] c27 N74-21156

Ultraviolet and thermally stable polymer compositions
[NASA-CASE-ARC-10592-2] c27 N76-32315

Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-XEW-12053-2] c23 N77-32244

AZO COMPOUNDS

Holding process for imidazopyrrolone polymers
[NASA-CASE-LAR-10547-1] c31 N74-13177

B

BACKGROUND NOISE

Electronic background suppression field scanning sensor for detecting point source targets
[NASA-CASE-XGS-05211] c07 N69-39980

BACKGROUND RADIATION

Method and apparatus for background signal

reduction in opto-acoustic absorption measurement
[NASA-CASE-NPO-13683-1] c35 N77-14411

BACKSCATTERING

Apparatus for measuring backscatter and transmission characteristics of sample segment of large spherical passive satellites
[NASA-CASE-XGS-02606] c07 N70-41678

Mossbauer spectrometer radiation detector
[NASA-CASE-LAR-11155-1] c35 N74-15091

BACKUPS

Flexible backup bar for welding awkwardly shaped structures
[NASA-CASE-XMF-00722] c15 N70-40204

Reliable electrical element heater using plural wire system and backup power sources
[NASA-CASE-MPS-21462-1] c33 N74-14935

BACTERIA

Decontamination of petroleum products with honey
[NASA-CASE-XNP-03835] c06 N71-23499

Portable tester for monitoring bacterial contamination by adenosine triphosphate light reaction
[NASA-CASE-GSC-10879-1] c14 N72-25413

Enzymatic luminescent bioassay method for determining bacterial levels in urine
[NASA-CASE-GSC-11092-2] c04 N73-27052

Lyophilized spore dispenser
[NASA-CASE-LAR-10544-1] c37 N74-13178

Method of detecting and counting bacteria
[NASA-CASE-GSC-11917-2] c51 N76-29891

Detection of microbial infection in blood and antibiotic determinations
[NASA-CASE-GSC-12045-1] c52 N77-18733

BACTERIOLOGY

Detection of bacteria in biological fluids and foods
[NASA-CASE-GSC-11533-1] c14 N73-13435

Application of luciferase assay for ATP to antimicrobial drug susceptibility
[NASA-CASE-GSC-12039-1] c51 N77-22794

Determination of antimicrobial susceptibilities of infected urines without isolation
[NASA-CASE-GSC-12046-1] c52 N77-26797

Automated single-slide staining device
[NASA-CASE-LAR-11649-1] c51 N77-27677

BAFFLES

Light radiation direction indicator with baffle of two parallel grids
[NASA-CASE-XNP-03930] c14 N69-24331

Light baffle with oblate hemispheroid surface and shading flange
[NASA-CASE-NPO-10337] c14 N71-15604

Flexible ring slosh damping baffle for spacecraft fuel tank
[NASA-CASE-LAR-10317-1] c32 N71-16103

Submerged fuel tank baffles to prevent sloshing in liquid propellant rocket flight
[NASA-CASE-XLA-04605] c32 N71-16106

Floating baffle for tank drain
[NASA-CASE-XSC-10639] c15 N73-26472

System for the measurement of ultra-low stray light levels --- light shields and baffles
[NASA-CASE-MPS-23513-1] c74 N77-14842

BAGS

Fecal waste disposal container
[NASA-CASE-XMS-06761] c05 N69-23192

BALANCE

Thermoprotective device for balances
[NASA-CASE-XAC-00648] c14 N70-40400

Device for monitoring a change in mass in varying gravimetric environments
[NASA-CASE-MPS-21556-1] c35 N74-26945

BALANCING

Automatic balancing device for use on frictionless supported attitude-controlled test platforms
[NASA-CASE-LAR-10774] c10 N71-13545

Force balanced throttle valve for fuel control in rocket engines
[NASA-CASE-NPO-10808] c15 N71-27432

Static force balancing system attached to lifting body
[NASA-CASE-LAR-10348-1] c11 N73-12264

BALL BEARINGS

Combination guide and rotary bearing for freely moving shaft
[NASA-CASE-XLA-00013] c15 N71-29136

- Method for reducing mass of ball bearings for long life operation at high speed
[NASA-CASE-LEW-10856-1] c15 N72-22490
- Low mass rolling element bearing assembly
[NASA-CASE-LEW-11087-1] c15 N73-30458
- Hollow rolling element bearings
[NASA-CASE-LEW-11087-3] c37 N74-21064
- Drilled ball bearing with a one piece anti-tipping cage assembly
[NASA-CASE-LEW-11925-1] c37 N75-31446
- Spherical bearing
[NASA-CASE-MFS-23447-1] c37 N77-11403
- BALLAST (MASS)**
Inflatable stabilizing system for use on life raft to reduce rocking and preclude capsizing
[NASA-CASE-MSC-12393-1] c02 N73-26006
- BALLASTS (IMPEDANCES)**
Apparatus for ballasting high frequency transistors
[NASA-CASE-XGS-05003] c09 N69-24318
- BALLISTICS**
Fiber modified polyurethane foam for ballistic protection
[NASA-CASE-ARC-10714-1] c27 N76-15310
- BALLOON SOUNDING**
Apparatus for controlling the temperature of balloon-borne equipment
[NASA-CASE-GSC-11620-1] c34 N74-23039
- BALLOONS**
Development and characteristics of hot air balloon deceleration and recovery system
[NASA-CASE-XLA-06824-2] c02 N71-11037
- Inflation system for balloon type satellites
[NASA-CASE-XGS-03351] c31 N71-16081
- System for controlling torque buildup in suspension of gondola connected to balloon by parachute shroud lines
[NASA-CASE-GSC-11077-1] c02 N73-13008
- BALLS**
Two axis flight controller with potentiometer control shafts directly coupled to rotatable ball members
[NASA-CASE-XFR-04104] c03 N70-42073
- BANDPASS FILTERS**
Helical coaxial resonator RF filter
[NASA-CASE-XGS-02816] c07 N69-24323
- Phase locked demodulator with bandwidth switching amplifier circuit
[NASA-CASE-XNP-01107] c10 N71-28859
- Signal to noise ratio determination circuit using bandpass limiter
[NASA-CASE-GSC-11239-1] c10 N73-25241
- Selective bandpass resonators using bandstop resonator pairs for microwave frequency operation
[NASA-CASE-GSC-10990-1] c09 N73-26195
- Dichroic plate --- as bandpass filters
[NASA-CASE-NPO-13506-1] c35 N76-15435
- Notch filter
[NASA-CASE-MFS-23303-1] c32 N77-18307
- BANDWIDTH**
Improvements in receiver of narrow bandwidth television system
[NASA-CASE-XMS-06740-1] c07 N71-26579
- Self-tuning electronic filter for maintaining constant bandwidth and center frequency gain
[NASA-CASE-ARC-10264-1] c09 N73-20231
- Turnstile and flared cone UHF antenna
[NASA-CASE-LAR-10970-1] c33 N76-14372
- Very narrow band width receiver
[NASA-CASE-GSC-12142-1] c32 N77-20299
- BARIUM**
Chemical system for releasing barium to create ion clouds in upper atmosphere and interplanetary space
[NASA-CASE-LAR-10670-1] c06 N73-30097
- BARIUM COMPOUNDS**
Improved cathode containing barium carbonate block and heated tungsten screen for electron bombardment ion thruster
[NASA-CASE-XLE-07087] c06 N69-39889
- BARIUM FLUORIDES**
Production of barium fluoride-calcium fluoride composite lubricant for bearings or seals
[NASA-CASE-XLE-08511-2] c18 N71-16105
- BARIUM ION CLOUDS**
Rocket having barium release system to create ion clouds in the upper atmosphere
[NASA-CASE-LAR-10670-2] c15 N74-27360
- BARIUM TITANATES**
Memory device employing semiconductor and ferroelectric properties of single crystal barium titanate
[NASA-CASE-ERC-10307] c08 N72-21198
- BARRIER LAYERS**
High voltage, high current Schottky barrier solar cell
[NASA-CASE-NPO-13482-1] c44 N74-30448
- BARRIERS**
Short range laser obstacle detector --- for surface vehicles using laser diode array
[NASA-CASE-NPO-11856-1] c36 N74-15145
- BASES (CHEMICAL)**
Low concentration alkaline solution treatment of aluminum with metal phosphate surface coatings to improve chemical bonding and reduce coating weight
[NASA-CASE-XLA-01995] c18 N71-23047
- BATTERY CHARGERS**
Battery charging system with cell to cell voltage balance
[NASA-CASE-XGS-05432] c03 N71-19438
- Alkaline-type coulometer cell for primary charge control in secondary battery recharge circuits
[NASA-CASE-XGS-05434] c03 N71-20491
- Development and characteristics of battery charging circuits with coulometer for control of available current
[NASA-CASE-GSC-10487-1] c03 N71-24719
- Method and apparatus for reconditioning nickel-cadmium batteries
[NASA-CASE-MFS-23270-1] c44 N77-12511
- BAYARD-ALPERT IONIZATION GAGES**
Describing hot filament type Bayard-alpert ionization gage with ion collector buried or removed from grid structure
[NASA-CASE-XLA-07424] c14 N71-18482
- BEADS**
Rotary bead dropper and selector for testing micrometeorite transducers
[NASA-CASE-XGS-03304] c09 N71-22988
- BEAM LEADS**
Integrated circuit package with lead structure and method of preparing the same
[NASA-CASE-MFS-21374-1] c33 N74-12951
- BEAM SPLITTERS**
Optical range finder using reflective first surfaces mirror and transmitting beam splitter
[NASA-CASE-MSC-12105-1] c14 N72-21409
- Method and apparatus for splitting a beam of energy
[NASA-CASE-GSC-12083-1] c36 N76-15451
- Laser extensometer
[NASA-CASE-MFS-19259-1] c36 N77-10516
- BEAM SWITCHING**
Using electron beam switching for brushless motor commutation
[NASA-CASE-XGS-01451] c09 N71-10677
- Antenna array at focal plane of reflector with coupling network for beam switching
[NASA-CASE-GSC-10220-1] c07 N71-27233
- Dish antenna having switchable beamwidth --- with truncated concave ellipsoid subreflector
[NASA-CASE-GSC-11760-1] c33 N75-19516
- Single frequency, two feed dish antenna having switchable beamwidth
[NASA-CASE-GSC-11968-1] c32 N76-15329
- Switchable beamwidth monopulse method and system
[NASA-CASE-GSC-11924-1] c33 N76-27472
- BEAM WAVEGUIDES**
Laser machining device with dielectric functioning as beam waveguide for mechanical and medical applications
[NASA-CASE-HQN-10541-2] c15 N71-27135
- Optical communication system with gas filled waveguide for laser beam transmission
[NASA-CASE-HQN-10541-4] c16 N71-27183
- Laser beam projector for continuous, precise alignment between target, laser generator, and astronomical telescope during tracking
[NASA-CASE-NPO-11087] c23 N71-29125
- BEAMS (RADIATION)**
Method and means for recording and reconstructing holograms without use of reference beam
[NASA-CASE-ERC-10020] c16 N71-26154
- Method and system for transmitting and distributing optical frequency radiation

BEARING (DIRECTION)

SUBJECT INDEX

- [NASA-CASE-HQN-10541-3] c23 N72-23695
RF beam center location method and apparatus for power transmission system
[NASA-CASE-NFO-13821-1] c44 N76-26692
- BEARING (DIRECTION)**
Light radiation direction indicator with baffle of two parallel grids
[NASA-CASE-XNP-03930] c14 N69-24331
Solar radiation direction detector and device for compensating degradation of photocells
[NASA-CASE-XLA-00183] c14 N70-40239
Michelson interferometer with photodetector for optical direction sensing
[NASA-CASE-NFO-10320] c14 N71-17655
Omnidirectional liquid filled accelerometer design with liquid and housing temperature compensation
[NASA-CASE-HQN-10780] c14 N71-30265
Magnetic heading reference
[NASA-CASE-LAR-11387-2] c04 N77-19056
- BEARINGS**
Metal alloy bearing materials for space applications
[NASA-CASE-XLE-05033] c15 N71-23810
Low friction bearing and lock mechanism for two-axis gimbal carrying satellite payload
[NASA-CASE-GSC-10556-1] c31 N71-26537
Measuring device for bearing preload using spring washers
[NASA-CASE-MFS-20434] c11 N72-25288
Magnetic bearing --- for supplying magnetic fluxes
[NASA-CASE-GSC-11079-1] c37 N75-18574
Bearing material
[NASA-CASE-LEW-11930-2] c24 N76-26282
Magnetic bearing system
[NASA-CASE-GSC-11978-1] c37 N77-17464
A cantilever mounted resilient pad gas bearing
[NASA-CASE-LEW-12569-1] c37 N77-24496
Hydrostatic bearing support
[NASA-CASE-LPW-11158-1] c37 N77-28486
Deformable bearing seat
[NASA-CASE-LEW-12527-1] c37 N77-32500
Bearing seat usable in a gas turbine engine
[NASA-CASE-LEW-12477-1] c37 N77-32501
- BEDS (PROCESS ENGINEERING)**
Catalyst bed element removing tool
[NASA-CASE-XFR-00811] c15 N70-36901
- BEER LAW**
Multichannel photoionization chamber for measuring absorption, photoionization yield, and coefficients of gases
[NASA-CASE-ERC-10044-1] c14 N71-27090
- BEES**
Decontamination of petroleum products with honey
[NASA-CASE-XNP-03835] c06 N71-23499
- BELLOWS**
Compact bellows spirometer for high speed and high altitude space travel
[NASA-CASE-XAR-01547] c05 N69-21473
Electrical connection for printed circuits on common board, using bellows principle in rivet
[NASA-CASE-XNP-05082] c15 N70-41960
Flexible bellows joint shielding sleeve for propellant transfer pipelines
[NASA-CASE-XNP-01855] c15 N71-28937
Internally supported flexible duct joint --- device for conducting fluids in high pressure systems
[NASA-CASE-MFS-19193-1] c37 N75-19686
- BELTS**
Apparatus for forming drive belts
[NASA-CASE-NFO-13205-1] c31 N74-32917
- BENDING**
Method and apparatus for bowing of instrument panels to improve radio frequency shielded enclosure
[NASA-CASE-XMF-09422] c07 N71-19436
Development of systems for automatically and continually suppressing or attenuating bending motion in elastic bodies
[NASA-CASE-XAC-05632] c32 N71-23971
Elbow forming in jacketed pipes while maintaining separation between core shape and jacket pipes
[NASA-CASE-XNP-10475] c15 N71-24679
Device for bending metal ribbon or wire
[NASA-CASE-XLA-05966] c15 N72-12408
- BENDING DIAGRAMS**
Charged particle analyzer with periodically varying voltage applied across electrostatic deflection members
[NASA-CASE-XAC-05506-1] c24 N71-16095
- BENDING FATIGUE**
Apparatus for testing metallic and nonmetallic beams or rods by bending at high temperatures in vacuum or inert atmosphere
[NASA-CASE-XLE-01300] c15 N70-41993
Cryostat for flexure fatigue testing of composite materials
[NASA-CASE-XMF-02964] c14 N71-17659
- BENDING MOMENTS**
Launch pad missile release system with bending moment change rate reduction in thrust distribution structure at liftoff
[NASA-CASE-XMF-03198] c30 N70-40353
- BENDING VIBRATION**
Mercury filled pendulum damper for controlling bending vibration induced by wind effects
[NASA-CASE-LAR-10274-1] c14 N71-17626
- BENZENE**
Para-benzoquinone dioxime and concentrated mineral acid processed to yield intumescent or fire resistant, heat insulating materials
[NASA-CASE-ARC-10304-1] c18 N73-26572
- BERYLLIUM ALLOYS**
Development of fluoride coating to prevent oxidation of beryllium surfaces at elevated temperatures
[NASA-CASE-LEW-10327] c17 N71-33408
- BERYLLIUM OXIDES**
High temperature beryllium oxide capacitor
[NASA-CASE-LEW-11938-1] c33 N76-15373
- BIMETALS**
Nonmagnetic thermal motor for magnetometer movement
[NASA-CASE-XAR-03786] c09 N69-21313
Design and development of linear actuator based on bimetallic spring expansion
[NASA-CASE-NFO-10637] c15 N72-12409
Application of spiral, bimetallic strip to create circular motion on mechanical shaft by changing strip temperature
[NASA-CASE-NFO-11283] c09 N72-25260
Development of thermal compensating structure which maintains uniform length with changes in temperature
[NASA-CASE-MFS-20433] c15 N72-28496
Bimetallic fluid displacement apparatus --- for stirring and heating stored gases and liquids
[NASA-CASE-ARC-10441-1] c35 N74-15126
Thermocouples of tantalum and rhenium alloys for more stable vacuum-high temperature performance
[NASA-CASE-LEW-12050-1] c35 N77-32454
- BINARY CODES**
Time division relay synchronizer with master sync pulse for activating binary counter to produce signal identifying time slot for station
[NASA-CASE-GSC-10373-1] c07 N71-19773
Logic circuit for generating multibit binary code word in parallel
[NASA-CASE-XNP-04623] c10 N71-26103
Design and development of encoder/decoder system to generate binary code which is function of outputs of plurality of bistable elements
[NASA-CASE-NFO-10342] c10 N71-33407
Binary coded sequential acquisition ranging system for distance measurements
[NASA-CASE-NFO-11194] c08 N72-25209
Binary to binary coded decimal converter
[NASA-CASE-GSC-12044-1] c60 N76-13781
Binary concatenated coding system
[NASA-CASE-HSC-14082-1] c60 N76-23850
Multiple rate digital command detection system--- with range clean-up capability
[NASA-CASE-NFO-13753-1] c32 N77-20289
Pseudo noise code and data transmission method and apparatus
[NASA-CASE-GSC-12017-1] c32 N77-30308
- BINARY DATA**
Nondestructive interrogating and state changing circuit for binary magnetic storage elements
[NASA-CASE-IGS-00174] c08 N70-34743
Logic circuit to ripple add and subtract binary counters for spaceborne computers
[NASA-CASE-XGS-04766] c08 N71-18602
Describing circuit for obtaining sum of squares of numbers
[NASA-CASE-IGS-04765] c08 N71-18693

- Digital synchronizer for extracting binary data in receiver of PSK/PCM communication system
[NASA-CASE-NPO-10851] c07 N71-24613
- Differential phase shift keyed communication system
[NASA-CASE-MSC-14065-1] c32 N74-26654
- Modulator for tone and binary signals --- phase of modulation of tone and binary signals on carrier waves in communication systems
[NASA-CASE-GSC-11743-1] c32 N75-24981
- BINARY DIGITS**
- Logarithmic converter for compressing 19-digit binary input number to 8-digit output
[NASA-CASE-XLA-00471] c08 N70-34778
- Circuit diagram and operation of full binary adder
[NASA-CASE-XGS-00689] c08 N70-34787
- Binary number sorter for arranging numbers in order of magnitude
[NASA-CASE-NPO-10112] c08 N71-12502
- Binary sequence detector with few memory elements and minimized logic circuit complexity
[NASA-CASE-XNP-05415] c08 N71-12505
- Cathode ray tube system for displaying ones and zeros in binary wave train
[NASA-CASE-XGS-04987] c08 N71-20571
- Characteristics of comparator circuits for comparison of binary numbers in information processing system
[NASA-CASE-XNP-04819] c08 N71-23295
- Digital converter for scaling binary number to binary coded decimal number of higher multiple
[NASA-CASE-KSC-10595] c08 N73-12176
- Family of m-ary linear feedback shift register with binary logic
[NASA-CASE-NPO-11868] c10 N73-20254
- Binary concatenated coding system
[NASA-CASE-MSC-14082-1] c60 N76-23850
- BINARY FLUIDS**
- Flow measuring apparatus
[NASA-CASE-LRW-12078-1] c35 N75-30503
- BINARY TO DECIMAL CONVERTERS**
- Binary to binary-coded decimal converter using single set of logic circuits notwithstanding number of shift register decades
[NASA-CASE-XNP-00432] c08 N70-35423
- Design and operation of high speed binary to decimal conversion system
[NASA-CASE-XGS-01230] c08 N71-19544
- Binary to decimal decoder logic circuit design with feedback control and display device
[NASA-CASE-XKS-06167] c08 N71-24890
- High speed direct binary to binary coded decimal converter for use in PCM telemetry systems
[NASA-CASE-KSC-10326] c08 N72-21197
- Binary to binary coded decimal converter
[NASA-CASE-GSC-12044-1] c60 N76-13781
- BINDERS (MATERIALS)**
- Bonded solid lubricant coatings of calcium fluoride and binder for high temperature stability
[NASA-CASE-XMS-00259] c18 N70-36400
- Brazing alloy binder
[NASA-CASE-XNP-05868] c26 N75-27125
- BINOCULARS**
- Binocular device for displaying numerical information in field of view
[NASA-CASE-LAR-11782-1] c74 N77-20882
- BIOACOUSTICS**
- Hearing aid malfunction detection system
[NASA-CASE-MSC-14916-1] c33 N77-13335
- BIOASSAY**
- Spectrophotofluorometer with 3-dimensional display to identify fluorescence spectra of carcinogenic and noncarcinogenic hydrocarbons
[NASA-CASE-XGS-01231] c14 N70-41676
- Bioassay of flavin coenzymes
[NASA-CASE-GSC-10565-1] c06 N72-25149
- Enzymatic luminescent bioassay method for determining bacterial levels in urine
[NASA-CASE-GSC-11092-2] c04 N73-27052
- Amino acid analysis
[NASA-CASE-NPO-12130-1] c25 N75-14844
- Servo-controlled intravital microscope system
[NASA-CASE-NPO-13214-1] c35 N75-25123
- Method of detecting and counting bacteria
[NASA-CASE-GSC-11917-2] c51 N76-29891
- Automated clinical system for chromosome analysis
[NASA-CASE-NPO-13913-1] c52 N77-19750
- Determination of antimicrobial susceptibilities of infected urines without isolation
[NASA-CASE-GSC-12046-1] c52 N77-26797
- BIOELECTRIC POTENTIAL**
- Electrochemically reversible silver-silver chloride electrode for detecting bioelectric potential differences generated by human muscles and organs
[NASA-CASE-XMS-02872] c05 N69-21925
- Manufacturing process for making perspiration resistant-stress resistant biopotential electrode
[NASA-CASE-MSC-90153-2] c05 N72-25120
- Process for control of cell division
[NASA-CASE-LAR-10773-3] c51 N77-25769
- BIOELECTRICITY**
- Development and characteristics of electrodes in which poisoning by organic molecules is prevented by ion selective electrolytic deposition of hydrophilic protein colloid
[NASA-CASE-XMS-04213-1] c09 N71-26002
- BIOENGINEERING**
- Bio-isolated dc operational amplifier --- for bioelectric measurements
[NASA-CASE-ABC-10596-1] c33 N74-21851
- Actuator device for artificial leg
[NASA-CASE-MFS-23225-1] c52 N77-14735
- Percutaneous connector device
[NASA-CASE-KSC-10849-1] c52 N77-14738
- BIOINSTRUMENTATION**
- Temperature compensated solid state differential amplifier with application in bioinstrumentation circuits
[NASA-CASE-XAC-00435] c09 N70-35440
- Electrode attached to helmets for detecting low level signals from skin of living creatures
[NASA-CASE-ABC-10043-1] c05 N71-11193
- Characteristics of pressed disc electrode for biological measurements
[NASA-CASE-XMS-04212-1] c05 N71-12346
- Development of apparatus and method for quantitatively measuring brain activity as automatic indication of sleep state and level of consciousness
[NASA-CASE-MSC-13282-1] c05 N71-24729
- Development and characteristics of electrodes in which poisoning by organic molecules is prevented by ion selective electrolytic deposition of hydrophilic protein colloid
[NASA-CASE-XMS-04213-1] c09 N71-26002
- Ultrasonic biomedical measuring and recording apparatus --- for recording motion of internal organs such as heart valves
[NASA-CASE-ABC-10597-1] c52 N74-20726
- Subminiature insertable force transducer --- including a strain gage to measure forces in muscles
[NASA-CASE-NPO-13423-1] c33 N75-31329
- A condition sensor system and method
[NASA-CASE-MSC-14805-1] c35 N76-26448
- A logic-controlled occlusive cuff system
[NASA-CASE-MSC-14836-1] c52 N76-27839
- Catheter tip force transducer for cardiovascular research
[NASA-CASE-NPO-13643-1] c52 N76-29896
- Biomedical ultrasonoscope
[NASA-CASE-ABC-10994-1] c52 N76-33835
- Thermistor holder for skin temperature measurements
[NASA-CASE-ABC-10855-1] c52 N77-10780
- ERG and ultrasonoscope display
[NASA-CASE-ABC-10994-2] c52 N77-15619
- Induction powered biological radiosonde --- for measuring intracranial pressure
[NASA-CASE-ABC-11120-1] c52 N77-23743
- Magnetic electrical connectors for biomedical percutaneous implants
[NASA-CASE-KSC-11030-1] c52 N77-25772
- Corneal seal device
[NASA-CASE-LRW-12258-1] c52 N77-28716
- Snap-in compressible biomedical electrode
[NASA-CASE-MSC-14623-1] c52 N77-28717
- BIOLUMINESCENCE**
- Detection instrument for light emitted from ATP biochemical reaction
[NASA-CASE-XGS-05534] c23 N71-16355
- Describing method for lyophilization of luciferase containing mixtures for use in life detection reactions

BIO MEDICAL DATA

SUBJECT INDEX

- [NASA-CASE-XGS-05532] c06 N71-17705
Application of luciferase assay for ATP to
antimicrobial drug susceptibility
[NASA-CASE-GSC-12039-1] c51 N77-22794
- BIO MEDICAL DATA**
Silicon radiation detecting probe design for in
vivo biomedical use
[NASA-CASE-XMS-01177] c05 N71-19440
- BIOMETRICS**
Characteristics of pressed disc electrode for
biological measurements
[NASA-CASE-XMS-04212-1] c05 N71-12346
Compressible electrolyte saturated sponge
electrode for biomedical applications
[NASA-CASE-MSC-13648] c05 N72-27103
Ultrasonic biomedical measuring and recording
apparatus --- for recording motion of internal
organs such as heart valves
[NASA-CASE-ARC-10597-1] c52 N74-20726
Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] c52 N74-27566
Biomedical ultrasonoscope
[NASA-CASE-ARC-10994-1] c52 N76-33835
- BIOTELEMETRY**
Biotelemetry apparatus with dual voltage
generators for implanting in animals
[NASA-CASE-XAC-05706] c05 N71-12342
Miniature multichannel biotelemetry system
[NASA-CASE-NPO-13065-1] c52 N74-26625
Medical subject monitoring systems ---
multichannel monitoring systems
[NASA-CASE-MSC-14180-1] c52 N76-14757
Accelerometer telemetry system
[NASA-CASE-ARC-10849-1] c17 N76-29347
Miniature ingestible telemeter devices to
measure deep-body temperature
[NASA-CASE-ARC-10583-1] c52 N76-29894
- BIREFRINGENCE**
Automatic polarimeter capable of measuring
transient birefringence changes in
electro-optic materials
[NASA-CASE-XNP-08883] c23 N71-16101
Partial polarizer filter
[NASA-CASE-GSC-12225-1] c74 N77-30935
- BIREFRINGENT FILTERS**
Partial polarizer filter
[NASA-CASE-GSC-12225-1] c74 N77-30935
- BISMUTH COMPOUNDS**
Hall effect magnetometer
[NASA-CASE-LPW-11632-2] c35 N75-13213
- BISTABLE CIRCUITS**
Bistable multivibrator circuits operating at
high speed and low power dissipation
[NASA-CASE-XGS-00823] c10 N71-15910
- BIT SYNCHRONIZATION**
Telemetry data unit to form multibit words for
use between demodulator and computer
[NASA-CASE-XNP-09225] c09 N69-24333
Bit synchronization system using digital data
transition tracking phased locked loop
[NASA-CASE-NPO-10844] c07 N72-20140
Bit synchronization of PCM communications
signal, without separate synchronization
channel by digital correlation
[NASA-CASE-NFO-11302-1] c07 N73-13149
Method and apparatus for a single channel
digital communications system ---
synchronization of received PCM signal by
digital correlation with reference signal
[NASA-CASE-NFO-11302-2] c32 N74-10132
- BITEBINARY CODE**
Encoders designed to generate comma free
biorthogonal Reed-Muller type code comprising
conversion of 64 6-bit words into 64 32-bit
data for communication purposes
[NASA-CASE-NPO-10595] c10 N71-25917
- BITS**
Logic circuit for generating multibit binary
code word in parallel
[NASA-CASE-XNP-04623] c10 N71-26103
MOD 2 sequential function generator for multibit
sequence, with two-bit shift register for each
pair of bits
[NASA-CASE-NPO-10636] c08 N72-25210
Bit error rate measurement above and below bit
rate tracking threshold
[NASA-CASE-MSC-12743-1] c32 N77-19290
- BLACK BODY RADIATION**
Development of black-body source calibration
furnace
[NASA-CASE-XLE-01399] c33 N71-15625
Black body cavity radiometer with thermal
resistance wire bridge circuit
[NASA-CASE-XNP-08961] c14 N71-24809
Black body radiometer design with temperature
sensing and cavity heat source cone winding
[NASA-CASE-XNP-09701] c14 N71-26475
Black body radiometer having isothermally
surrounded cavity for ultraviolet, visible,
and infrared radiation
[NASA-CASE-NPO-10810] c14 N71-27323
- BLADE TIPS**
Modification and improvement of turbine blades
for maximum cooling efficiency
[NASA-CASE-XLE-00092] c15 N70-33264
- BLADES (CUTTERS)**
Piston in bore cutter for severing parachute
control lines and sealing cable hole to
prevent water leakage into load
[NASA-CASE-XMS-04072] c15 N70-42017
- BLAST LOADS**
Development of apparatus for detonating
explosive devices in order to determine forces
generated and detonation propagation rate
[NASA-CASE-LAR-10800-1] c33 N72-27959
- BLOOD**
Reduction of blood serum cholesterol
[NASA-CASE-NPO-12119-1] c52 N75-15270
Detection of microbial infection in blood and
antibiotic determinations
[NASA-CASE-GSC-12045-1] c52 N77-18733
- BLOOD FLOW**
A logic-controlled occlusive cuff system
[NASA-CASE-MSC-14836-1] c52 N76-27839
- BLOOD PRESSURE**
Blood pressure measuring system for separately
recording dc and ac pressure signals of
Korotkoff sounds
[NASA-CASE-XMS-06061] c05 N71-23317
Apparatus and method for processing Korotkov
sounds --- for blood pressure measurement
[NASA-CASE-MSC-13999-1] c52 N74-26626
Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] c52 N74-27566
Circuit for detecting initial systole and
diastolic notch --- for monitoring arterial
pressure
[NASA-CASE-LEW-11581-1] c54 N75-13531
- BLUFF BODIES**
Bluff-shaped annular configuration for
supersonic decelerator for reentry vehicles
[NASA-CASE-XLE-00222] c02 N70-37939
- BLUNT BODIES**
Wind tunnel method for simulating flow fields
around blunt vehicles entering planetary
atmospheres without involving high temperatures
[NASA-CASE-LAR-11138] c12 N71-20436
- BODIES OF REVOLUTION**
Conforming polisher for aspheric surfaces of
revolution with inflatable tube
[NASA-CASE-XGS-02884] c15 N71-22705
Test fixture for measuring moment of inertia of
irregularly shaped body with multiple axes
[NASA-CASE-XGS-01023] c14 N71-22992
- BODY FLUIDS**
Programmable physiological infusion
[NASA-CASE-ARC-10447-1] c52 N74-22771
Method of detecting and counting bacteria
[NASA-CASE-GSC-11917-2] c51 N76-29891
- BODY KINEMATICS**
Space suit with improved waist and torso movement
[NASA-CASE-ARC-10275-1] c05 N72-22092
An improved controller arm for a remotely
related slave arm
[NASA-CASE-ARC-11052-1] c54 N77-30751
- BODY MEASUREMENT (BIOLOGY)**
Biomedical ultrasonoscope
[NASA-CASE-ARC-10994-1] c52 N76-33835
- BODY TEMPERATURE**
Thermoregulating with cooling flow pipe network
for humans
[NASA-CASE-XMS-10269] c05 N71-24147
Miniature ingestible telemeter devices to
measure deep-body temperature
[NASA-CASE-ARC-10583-1] c52 N76-29894
- BODY VOLUME (BIOLOGY)**
Whole body measurement systems --- for
weightlessness simulation

[NASA-CASE-MSC-13972-1] c52 N74-10975
BODY-WING CONFIGURATIONS
 An improved free wing for an aircraft
 [NASA-CASE-FRC-10092-1] c05 N77-31135

BOILERS
 Vapor generating boiler system for turbine motor
 [NASA-CASE-XLE-0C785] c33 N71-16104
 Shell-side liquid metal boiler employing tube
 and shell heat exchanger
 [NASA-CASE-NPO-10831] c33 N72-20915

BOLOMETERS
 High impedance alternating current sensing
 transformer device between two bolometers for
 measuring insertion loss of test component
 [NASA-CASE-XNP-01193] c10 N71-16057
 Thin film capacitive bolometer and capacitance
 temperature interchange sensor
 [NASA-CASE-NPO-10607] c09 N71-27232

BOLTS
 Patent data on gas actuated bolt disconnect
 assembly
 [NASA-CASE-XLA-00326] c03 N70-34667
 Bolt-latch mechanism for releasing despin
 weights from space vehicle
 [NASA-CASE-XLA-00679] c15 N70-38601
 Gage for quality control of sealing surfaces of
 threaded boss
 [NASA-CASE-XNP-04966] c14 N71-17658
 Split nut and bolt separation device
 [NASA-CASE-XNP-06914] c15 N71-21489
 Device for securing together structural members
 with axially stretched bolt and nut
 [NASA-CASE-GSC-11149-1] c15 N73-30457

BONDING
 Silver chloride use in technique for fusion
 bonding of graphite to silver, glass,
 ceramics, and certain other metals
 [NASA-CASE-IGS-00963] c15 N69-39735
 Bonded joint and method --- for reducing peak
 shear stress in adhesive bonds
 [NASA-CASE-LAR-10900-1] c37 N74-23064
 Bonding method in the manufacture of continuous
 regression rate sensor devices
 [NASA-CASE-LAR-10337-1] c24 N75-30260
 Strain arrestor plate for fused silica tile ---
 bonding of thermal insulation to metallic
 plates or structural parts
 [NASA-CASE-MSC-14182-1] c27 N76-14264
 Bonding of sapphire to sapphire by eutectic
 mixture of aluminum oxide and zirconium oxide
 [NASA-CASE-GSC-11577-3] c24 N76-19234

BONES
 Ultrasonic bone densitometer
 [NASA-CASE-NFS-20994-1] c35 N75-12271
 Graphite reinforced bone cement
 [NASA-CASE-NPO-13764-1] c24 N76-26281
 Method and system for in vivo measurement of
 bone tissue using a two level energy source
 [NASA-CASE-MSC-14276-1] c52 N77-14737

BOOMS (EQUIPMENT)
 Unfolding boom assembly with knuckle joints for
 positioning equipment for spacecraft
 [NASA-CASE-IGS-00938] c32 N70-41367
 Collapsible antenna boom and coaxial
 transmission line having inflatable inner tube
 [NASA-CASE-NFS-20068] c07 N71-27191
 Extendable, self-deploying boom apparatus
 [NASA-CASE-GSC-10566-1] c15 N72-18477
 Design and characteristics of mechanically
 extended and telescoping boom on crane assembly
 [NASA-CASE-NPO-11118] c03 N72-25021

BOOSTER RECOVERY
 Techniques for recovery of multistage rocket
 vehicles by providing lifting surfaces on
 individual sections
 [NASA-CASE-XNP-00389] c31 N70-34176
 Recoverable, reusable single stage booster
 capable of injecting large payloads into
 circular earth orbit
 [NASA-CASE-XNP-01973] c31 N70-41588

BOOSTER ROCKET ENGINES
 Segmented back-up bar for butt welding large
 tubular structures such as rocket booster
 bodies or tanks
 [NASA-CASE-XNP-00640] c15 N70-39924
 Recoverable, reusable single stage booster
 capable of injecting large payloads into
 circular earth orbit
 [NASA-CASE-XNP-01973] c31 N70-41588

BOOTS (FOOTWEAR)
 A walking boot assembly
 [NASA-CASE-ARC-11101-1] c54 N77-14742

BORING MACHINES
 Automatic controlled drive mechanism for
 portable boring bar
 [NASA-CASE-XLA-03661] c15 N71-33518

BORON
 Radiation hardening of MOS devices by boron ---
 for stabilizing gate threshold potential of
 field effect device
 [NASA-CASE-GSC-11425-1] c76 N74-20329

BORON CARBIDES
 Catalyst for increased growth of boron carbide
 crystal whiskers
 [NASA-CASE-XHQ-03903] c15 N69-21922

BORON FLUORIDES
 Boron trifluoride coatings for thermoplastic
 materials
 [NASA-CASE-ARC-11057-1] c27 N77-26308

BOUNDARY LAYER CONTROL
 Double hinged flap for boundary layer control
 over trailing edges of wings
 [NASA-CASE-XLA-01290] c02 N70-42016

BOUNDARY LAYER SEPARATION
 Tertiary flow injection system for thrust
 vectoring of propulsive nozzle flow
 [NASA-CASE-NFS-20831] c28 N71-29153
 Controlled separation combustor --- airflow
 distribution in gas turbine engines
 [NASA-CASE-LFW-11593-1] c20 N76-14190

BOUNDARY LAYERS
 Flow meter for measuring stagnation pressure in
 boundary layer around high speed flight vehicle
 [NASA-CASE-XPR-02007] c12 N71-24692
 Development of thermocouple instrument for
 measuring temperature of wall heated by
 flowing fluid without disturbing boundary layer
 [NASA-CASE-XLE-05230] c14 N72-27410

BOXES (CONTAINERS)
 Sealed storage container for channel carriers
 with mounted miniature electronic components
 [NASA-CASE-NFS-20075] c09 N71-26133

BRAKES (FOR ARRESTING MOTION)
 Energy dissipating shock absorbing system for
 land payload recovery or vehicle braking
 [NASA-CASE-XLA-00754] c15 N70-34850
 Automatic braking device for rapidly
 transferring humans or materials from elevated
 location
 [NASA-CASE-XKS-07814] c15 N71-27067
 Sprag solenoid brake --- development and
 operations of electrically controlled brake
 [NASA-CASE-NFS-21846-1] c37 N74-26976
 Motion restraining device --- for dissipating at
 a controlled rate the force of a moving body
 [NASA-CASE-NPO-13619-1] c37 N75-22748
 Reel safety brake
 [NASA-CASE-GSC-11960-1] c37 N77-14479

BRAKING
 Direct current electromotive system for
 regenerative braking of electric motor
 [NASA-CASE-XNP-01096] c10 N71-16030
 Linear magnetic braking system with nonuniformly
 wrapped primary coil producing constant
 braking force on secondary coil
 [NASA-CASE-XLE-05079] c15 N71-17652
 Anemometer with braking mechanism to prevent
 rotation of wind driven elements
 [NASA-CASE-XNP-05224] c14 N71-23726

BRAZING
 Anti-wettable materials brazing processes using
 titanium and zirconium for surface pretreatment
 [NASA-CASE-XNS-03537] c15 N69-21471
 Application techniques for protecting materials
 during salt bath brazing
 [NASA-CASE-XLB-00046] c15 N70-33311
 Joining aluminum to stainless steel by bonding
 aluminum coatings onto titanium coated
 stainless steel and brazing aluminum to
 aluminum/titanium coated steel
 [NASA-CASE-NFS-07369] c15 N71-20443
 Brazing alloy adapted for brazing corrosion
 resistant steel to refractory metals, also for
 brazing refractory metals to other refractory
 metals
 [NASA-CASE-XNP-03063] c17 N71-23365
 Electric resistance spot welding and brazing for
 producing metal bonds with superior mechanical

- and structural characteristics
[NASA-CASE-LAR-11072-1] c15 N73-20535
- Brazing alloy binder
[NASA-CASE-XNP-05868] c26 N75-27125
- Brazing alloy composition
[NASA-CASE-XNP-06053] c26 N75-27126
- Brazing alloy
[NASA-CASE-XNP-03878] c26 N75-27127
- Method of fluxless brazing and diffusion bonding of aluminum containing components
[NASA-CASE-MSC-14435-1] c37 N76-18455
- BREATHING APPARATUS**
- Three-port transfer valve with one port open continuously suitable for manned space flight
[NASA-CASE-XAC-01158] c15 N71-23051
- Self-contained breathing apparatus
[NASA-CASE-MSC-14733-1] c54 N76-24900
- Portable breathing system
[NASA-CASE-MSC-16182-1] c54 N77-21847
- BRICKS**
- Development of construction block in form of container folded from flat sheet and filled with solid material for architectural purposes
[NASA-CASE-MSC-12233-2] c32 N73-13921
- BRIGHTNESS**
- Modulating and controlling intensity of light beam from high temperature source by servocontrolled rotating cylinders
[NASA-CASE-XMS-04300] c09 N71-19479
- BRIGHTNESS DISCRIMINATION**
- Video signal processing system for sampling video brightness levels
[NASA-CASE-NPO-10140] c07 N71-24742
- Automated visual sensitivity tester for determining visual field sensitivity and blind spot size
[NASA-CASE-ARC-10329-1] c05 N73-26072
- BRITTLENESS**
- Rock sampling --- apparatus for controlling particle size
[NASA-CASE-XNP-10007-1] c46 N74-23068
- Rock sampling --- method for controlling particle size distribution
[NASA-CASE-XNP-09755] c46 N74-23069
- BROADBAND**
- Broadband chokes and absorbers to reduce spurious radiation patterns of antenna array caused by support structures
[NASA-CASE-XMS-05303] c07 N69-27462
- Flexible monopole antenna with broad bandwidth and low voltage standing wave ratio
[NASA-CASE-MSC-12101] c09 N71-18720
- Broadband frequency discriminator with resistive captive inductive networks
[NASA-CASE-NPO-10096] c07 N71-24583
- Broadband microwave waveguide window to compensate dielectric material filling
[NASA-CASE-XNP-08880] c09 N71-24808
- Comb type traveling wave maser amplifier for improved high gain broadband output
[NASA-CASE-NPO-10548] c16 N71-24831
- Wideband voltage controlled oscillator with high phase stability
[NASA-CASE-XLA-03893] c10 N71-27271
- Multimode antenna feed system for microwave and broadband communication
[NASA-CASE-GSC-11046-1] c07 N73-28013
- BROADBAND AMPLIFIERS**
- Solid state broadband stable power amplifier
[NASA-CASE-XNP-10854] c10 N71-26331
- Broadband distribution amplifier with complementary pair transistor output stages
[NASA-CASE-NPO-10003] c10 N71-26415
- BROADCASTING**
- Vehicle locating system utilizing AM broadcasting station carriers
[NASA-CASE-NPO-13217-1] c32 N75-26194
- BROMINE**
- Hydrogen-bromine secondary battery
[NASA-CASE-NPO-13237-1] c44 N76-18641
- BRUSHES**
- Fabrication of sintered impurity semiconductor brushes for electrical energy transfer
[NASA-CASE-XNP-01016] c26 N71-17818
- BUCKLING**
- Miniature vibration isolator utilizing elastic tubing material
[NASA-CASE-XLA-01019] c15 N70-40156
- Test equipment to prevent buckling of small diameter specimens during compression tests
[NASA-CASE-LAR-10440-1] c14 N73-32323
- BUFFER STORAGE**
- Data handling based on source significance, storage availability, and data received from source
[NASA-CASE-XNP-04162-1] c08 N70-34675
- Data acquisition and processing system with buffer storage and timing device for magnetic tape recording of PCM data and timing information
[NASA-CASE-NPO-12107] c08 N71-27255
- Digital to analog converter with parallel input/output memory device
[NASA-CASE-MSC-10397] c08 N72-25206
- BUILDINGS**
- Apparatus and method of assembling building blocks by folding pre-cut flat sheets of material during on-site construction
[NASA-CASE-MSC-12233-1] c15 N72-25454
- BULKHEADS**
- Liquid propellant tank design with semitoroidal bulkhead
[NASA-CASE-XNP-01899] c31 N70-41948
- BUOYANCY**
- Inflatable radar reflector unit - lightweight, highly reflective to electromagnetic radiation, and adaptable for erection and deployment with minimum effort and time
[NASA-CASE-XMS-00893] c07 N70-40063
- BURNING RATE**
- Pressurized gas injection for burning rate control of solid propellants
[NASA-CASE-XLE-03494] c27 N71-21819
- Development of apparatus for testing burning rate and flammability of materials
[NASA-CASE-XMS-09690] c33 N72-25913
- BURNOUT**
- Spherical solid propellant rocket engine having abrupt burnout
[NASA-CASE-XHQ-01897] c28 N70-35381
- BUTT JOINTS**
- Channel-type shell construction for rocket engines and related configurations
[NASA-CASE-XLE-00144] c28 N70-34860
- Segmented back-up bar for butt welding large tubular structures such as rocket booster bodies or tanks
[NASA-CASE-XNP-00640] c15 N70-39924
- Apparatus for welding sheet material --- butt joints
[NASA-CASE-XMS-01330] c37 N75-27376
- BUTTERFLY VALVES**
- Flexible inflatable seal for butterfly valves
[NASA-CASE-XLE-00101] c15 N70-33376
- BYPASSES**
- Low power drain transistor feedback circuit
[NASA-CASE-XGS-04999] c09 N69-24317
- Helical coaxial resonator RF filter
[NASA-CASE-XGS-02816] c07 N69-24323
- Current regulating voltage divider design with load current shunting
[NASA-CASE-MFS-20935] c09 N71-34212
- Electrical interconnection of unilluminated solar cells in solar battery array
[NASA-CASE-GSC-10344-1] c03 N72-27053

C

CABLE FORCE RECORDERS

- Design and characteristics of device for showing amount of cable payed out from winch and load imposed
[NASA-CASE-MSC-12052-1] c15 N71-24599

CABLES

- Cable guide and restraint device for reefing tubes in uniform manner
[NASA-CASE-LAR-10129-1] c15 N73-25512
- Deployable flexible tunnel
[NASA-CASE-MFS-22636-1] c37 N76-22540

CABLES (ROPES)

- High voltage cable for use in high intensity ionizing radiation fields
[NASA-CASE-XNP-00738] c09 N70-38201
- Force separation rigid tethering device using cables
[NASA-CASE-XLA-02332] c32 N71-17609

- Support for flexible conductor cable between drawers or racks holding electronic equipment and cabinet assembly housing drawers or racks
[NASA-CASE-XHF-07587] c15 N71-18701
- Design and construction of satellite appendage tie-down cord
[NASA-CASE-XGS-02554] c31 N71-21064
- Quick attach mechanism for moving or stationary wires, ropes, or cables
[NASA-CASE-XPR-05421] c15 N71-22994
- Flexible cable that can be made rigid
[NASA-CASE-MSC-13512-1] c15 N72-22485
- Guide member for stabilizing cable of open shaft elevator
[NASA-CASE-KSC-10513] c15 N72-25453
- Reefing system
[NASA-CASE-LAR-10129-2] c37 N74-20063
- Emergency descent device
[NASA-CASE-MFS-23074-1] c54 N77-21844
- CADMIUM SULFIDES**
- High field Cds detector for infrared radiation
[NASA-CASE-LAR-11027-1] c35 N74-18088
- CALCIUM**
- Ultrasonic bone densitometer
[NASA-CASE-MFS-20994-1] c35 N75-12271
- CALCIUM FLUORIDES**
- Bonded solid lubricant coatings of calcium fluoride and binder for high temperature stability
[NASA-CASE-XMS-00259] c18 N70-36400
- Production of barium fluoride-calcium fluoride composite lubricant for bearings or seals
[NASA-CASE-XLE-08511-2] c18 N71-16105
- CALCIUM OXIDES**
- Process for the preparation of calcium superoxide
[NASA-CASE-ARC-11053-1] c25 N77-29252
- CALCIUM PHOSPHATES**
- Process for preparing calcium phosphate salts for tooth repair
[NASA-CASE-ERC-10338] c04 N72-33072
- CALCULATORS**
- Sun angle calculator
[NASA-CASE-MSC-12617-1] c35 N76-29552
- CALIBRATING**
- Development and characteristics of self-calibrating displacement transducer for measuring magnitude and frequency of displacement of bodies
[NASA-CASE-XLA-00781] c09 N71-22999
- Combination pressure transducer-calibrator assembly for measuring fluid
[NASA-CASE-INP-01660] c14 N71-23036
- Control system for pressure balance device used in calibrating pressure gages
[NASA-CASE-XHF-04134] c14 N71-23755
- Phonocardiogram simulator producing electrical voltage waves to control amplitude and duration between simulated sounds
[NASA-CASE-YKS-10804] c05 N71-24606
- Calibrator for measuring and modulating or demodulating laser outputs
[NASA-CASE-XLA-03410] c16 N71-25914
- Plastic sphere for radar tracking and calibration
[NASA-CASE-XLA-11154] c07 N72-21117
- Calibration of vacuum gauges for measuring total and partial pressures in ultrahigh vacuum region
[NASA-CASE-IGS-07752] c14 N73-30390
- System for calibrating pressure transducer
[NASA-CASE-LAR-10910-1] c35 N74-13132
- In situ transfer standard for ultrahigh vacuum gage calibration
[NASA-CASE-LAR-10862-1] c35 N74-15092
- Ergometer calibrator --- for any ergometer utilizing rotating shaft
[NASA-CASE-MFS-21045-1] c35 N75-15932
- Ultrasonic calibration device --- for producing changes in acoustic attenuation and phase velocity
[NASA-CASE-LAR-11435-1] c35 N76-15432
- High temperature strain gage calibration fixture
[NASA-CASE-LAR-11500-1] c35 N76-24523
- Microcomputerized electric field meter diagnostic and calibration system
[NASA-CASE-KSC-11035-1] c33 N77-20343
- CALORIMETERS**
- Development and characteristics of calorimeter with integral heat sink for maintenance of constant temperature
[NASA-CASE-INP-04208] c33 N71-29051
- Heat flow calorimeter --- measures output of Ni-Cd batteries
[NASA-CASE-GSC-11434-1] c34 N74-27859
- CAMERA SHUTTERS**
- Electrically operated rotary shutter for television camera aboard spacecraft
[NASA-CASE-INP-00637] c14 N70-40273
- Magnetically opened diaphragm design with camera shutter and expansion tube applications
[NASA-CASE-XLA-03660] c15 N71-21060
- Development and characteristics of cyclically operable, optical shutter for use as focal plane shutter for transmitting single radiation pulses
[NASA-CASE-NPO-10758] c14 N73-14427
- Rotary solenoid shutter drive assembly and rotary inertia damper and stop plate assembly --- for use with cameras mounted in satellites
[NASA-CASE-GSC-11560-1] c33 N74-20861
- CAMERAS**
- Mechanism for measuring nanosecond time differences between luminous events using streak camera
[NASA-CASE-XLA-01987] c23 N71-23976
- Camera adapter design for image magnification including lens and illuminator
[NASA-CASE-INP-03844-1] c14 N71-26474
- Longitudinal film gate and lock mechanism for securing film in motion picture cameras under vibration and high acceleration loads
[NASA-CASE-LAR-10686] c14 N71-28935
- Design and characteristics of laser camera system with diffusion filter of small particles with average diameter larger than wavelength of laser light
[NASA-CASE-NFO-10417] c16 N71-33410
- Optical scanner with linear housing and rotating camera
[NASA-CASE-NFO-11002] c14 N72-22441
- Apparatus for on-film optical recording of camera lens aperture and focus setting
[NASA-CASE-MSC-12363-1] c14 N73-26431
- Mechanical exposure interlock device for preventing film overexposure in oscilloscope camera
[NASA-CASE-LAR-10319-1] c14 N73-32322
- Real time moving scene holographic camera system
[NASA-CASE-MFS-21087-1] c35 N74-17153
- Automatic focus control for facsimile cameras
[NASA-CASE-LAR-11213-1] c35 N75-15014
- Spectrometer integrated with a facsimile camera
[NASA-CASE-LAR-11207-1] c35 N75-19613
- Real time, large volume, moving scene holographic camera system
[NASA-CASE-MFS-22537-1] c35 N75-27328
- Holographic motion picture camera with Doppler shift compensation
[NASA-CASE-MFS-22517-1] c35 N76-18402
- Camera arrangement --- for satellite scanning of earth or sky
[NASA-CASE-GSC-12032-2] c35 N76-19408
- CANS**
- Controlled caging and uncaging mechanism
[NASA-CASE-GSC-11063-1] c37 N77-27400
- CANARD CONFIGURATIONS**
- Thrust and attitude control apparatus using jet nozzle in movable canard surface or fin configuration
[NASA-CASE-XLE-03583] c31 N71-17629
- CANCER**
- A cervix-to-rectum measuring device in a radiation applicator for use in the treatment of cervical cancer
[NASA-CASE-GSC-12081-2] c52 N77-26796
- CANOPIES**
- Transparent fire resistant polymeric structures
[NASA-CASE-ARC-10813-1] c27 N76-16230
- CANS**
- Design and characteristics of device for closing canisters under high vacuum conditions
[NASA-CASE-XLA-01446] c15 N71-21528
- Extrusion can for extruding ceramics under heat and pressure
[NASA-CASE-NPO-10812] c15 N73-13464
- An improved vehicular impact absorption system
[NASA-CASE-NPO-14014-1] c37 N77-31501
- CANTILEVER BEAMS**
- Pneumatic cantilever beams and platform for space erectable structure

- [NASA-CASE-XLA-01731] c32 N71-21045
CANTILEVER MEMBERS
 Deployable cantilever support for deploying solar cell arrays aboard spacecraft and reducing transient loading
 [NASA-CASE-NPO-10883] c31 N72-22874
 Miniature biaxial strain transducer
 [NASA-CASE-LAR-11648-1] c35 N77-14407
- CAPACITANCE**
 Capacitance measuring device for determining flare accuracy on tapered tubes
 [NASA-CASE-XKS-03495] c14 N69-39785
 Device for measuring two orthogonal components of force with gallium flotation of measuring target for use in vacuum environments
 [NASA-CASE-IAC-04885] c14 N71-23790
 Thin film capacitive bolometer and capacitance temperature interchange sensor
 [NASA-CASE-NPO-10607] c09 N71-27232
 Capacitive tank gaging device for monitoring one constituent of two phase fluid by sensing dielectric constant
 [NASA-CASE-MFS-21629] c14 N72-22442
 Adjustable frequency response microphone
 [NASA-CASE-LAR-11170-1] c32 N74-12843
 Capacitance multiplier and filter synthesizing network
 [NASA-CASE-NPO-11948-1] c33 N74-32712
 Direct reading inductance meter
 [NASA-CASE-NPO-13792-1] c35 N77-32455
- CAPACITANCE SWITCHES**
 Electric discharge apparatus for electrohydraulic explosive forming
 [NASA-CASE-XNP-00375] c15 N70-34249
 Extra-long monostable multivibrator employing bistable semiconductor switch to allow charging of timing circuit
 [NASA-CASE-XGS-00381] c09 N70-34819
 Feedback integrating circuit with grounded capacitor for signal processing
 [NASA-CASE-XAC-10607] c10 N71-23669
- CAPACITORS**
 Temperature sensitive capacitor device for detecting very low intensity infrared radiation
 [NASA-CASE-XNP-09750] c14 N69-39937
 Energy source with tantalum capacitors in parallel and miniature silver oxide button cells for initiating pyrotechnic devices on spacecraft and rocket vehicles
 [NASA-CASE-LAR-10367-1] c03 N70-26817
 Electrical power system for space flight vehicles operating over extended periods
 [NASA-CASE-XNP-00517] c03 N70-34157
 Capacitor for measuring density of compressible fluid in liquid, gas, or liquid and gas phases
 [NASA-CASE-XLE-00143] c14 N70-36618
 Capacitor sandwich structure containing metal sheets of known thickness for counting penetration rates of meteoroids
 [NASA-CASE-XLE-01246] c14 N71-10797
 Capacitor fabrication by solidifying mixture of ferromagnetic metal particles, nonferromagnetic particles, and dielectric material
 [NASA-CASE-LEW-10364-1] c09 N71-13522
 Mechanism for measuring nanosecond time differences between luminous events using streak camera
 [NASA-CASE-XLA-01987] c23 N71-23976
 Circuit for monitoring power supply by ripple current indication
 [NASA-CASE-KSC-10162] c09 N72-11225
 Thermoelectric radiometer using polymer film as capacitor
 [NASA-CASE-ARC-10138-1] c14 N72-24477
 Material compositions and processes for developing dielectric thick films used in microcircuit capacitors
 [NASA-CASE-LAR-10294-1] c26 N72-28762
 Micrometeoroid analyzer using arrays of interconnected capacitors and ion detector
 [NASA-CASE-ARC-10443-1] c14 N73-20477
 Insulated electrocardiographic electrodes --- without paste electrolyte
 [NASA-CASE-KSC-14339-1] c05 N75-24716
 High temperature beryllium oxide capacitor
 [NASA-CASE-LEW-11938-1] c33 N76-15373
 Mechanical capacitor
 [NASA-CASE-GSC-12030-1] c44 N76-30652
- A regulated high efficiency, lightweight capacitor-diode multiplier DC to DC converter
 [NASA-CASE-LEW-12791-1] c33 N77-24385
- CAPILLARY FLOW**
 Capillary radiator for carrying heat transfer liquid in planetary spacecraft structures
 [NASA-CASE-XLE-03307] c33 N71-14035
 Lubrication for bearings by capillary action from oil reservoir of porous material
 [NASA-CASE-XNP-03972] c15 N71-23048
 Soldering device particularly suited to making high quality wiring joints for aerospace engineering utilizing capillary attraction to regulate flow of solder
 [NASA-CASE-XLA-08911] c15 N71-27214
 Capillary flow weld-bonding
 [NASA-CASE-LAR-11726-1] c37 N76-27568
- CAPILLARY TUBES**
 Tubular flow restrictor for gas flow control in pipeline
 [NASA-CASE-NPO-10117] c15 N71-15608
 Development of liquid separating system using capillary device connected to flexible bladder storage chamber
 [NASA-CASE-XLA-13052] c14 N71-20427
 Interrupter switching device utilizing electrodes and mercury filled capillary tubes in which current flow vaporizes mercury as circuit breaker
 [NASA-CASE-XNP-02251] c12 N71-20896
 Diffused waveguiding capillary tube with distributed feedback for a gas laser
 [NASA-CASE-NPO-13544-1] c36 N76-18428
- CARBAZOLES**
 Method of producing output voltage from photovoltaic cell using poly-N-vinyl carbazole complexed with iodine
 [NASA-CASE-NPO-10373] c03 N71-18698
- CARBOHYDRATES**
 Decontamination of petroleum products with honey
 [NASA-CASE-XNP-03835] c06 N71-23499
- CARBON ARCS**
 Water cooled contactors for holding rotating carbon arc anode
 [NASA-CASE-XMS-03700] c15 N69-24266
- CARBON COMPOUNDS**
 Vapor deposited laminated nitride-silicon coating for corrosion prevention of carbonaceous surfaces
 [NASA-CASE-XLA-00284] c15 N71-16075
- CARBON DIOXIDE**
 Carbon dioxide purge systems to prevent condensation in spaces between cryogenic fuel tanks and hypersonic vehicle skin
 [NASA-CASE-XLA-01967] c31 N70-42015
 Fast response miniature carbon dioxide detector with no moving parts for measuring concentration in any atmosphere
 [NASA-CASE-KSC-13332-1] c14 N72-21408
- CARBON DIOXIDE LASERS**
 Repetitively pulsed wavelength selective carbon dioxide laser
 [NASA-CASE-FRC-10178] c16 N71-24832
 Performance of ac power supply developed for CO2 laser system
 [NASA-CASE-GSC-11222-1] c16 N73-32391
 Stark-effect modulation of CO2 laser with NH2D
 [NASA-CASE-NPO-11945-1] c36 N76-18427
- CARBON DIOXIDE REMOVAL**
 Catalyst cartridge for carbon dioxide reduction unit
 [NASA-CASE-LAR-10551-1] c25 N74-12813
 Regenerable device for scrubbing breathable air of CO2 and moisture without special heat exchanger equipment
 [NASA-CASE-KSC-14771-1] c54 N77-32722
- CARBON MONOXIDE**
 Carbon monoxide monitor --- using real time operation
 [NASA-CASE-MFS-22060-1] c35 N75-29380
- CARBONATES**
 Chemical and physical properties of synthetic polyurethane polymer prepared by reacting hydroxy carbonate with organic diisocyanate
 [NASA-CASE-MFS-10512] c06 N73-30099
- CARBOXYL GROUP**
 Carboxyl terminated polyester prepolymers and foams produced from prepolymers and materials
 [NASA-CASE-NPO-10596] c06 N71-25929

CARBOXYLIC ACIDS

Stable polyimide synthesis from mixtures of monomeric diamines and polycarboxylic acid esters
[NASA-CASE-LEW-11325-1] c06 N73-27980
Fluorinated esters of polycarboxylic acid and lubricating compositions for use at extreme temperature
[NASA-CASE-HFS-21040-1] c06 N73-30098

CARCINOGENS

Spectrophotofluorometer with 3-dimensional display to identify fluorescence spectra of carcinogenic and noncarcinogenic hydrocarbons
[NASA-CASE-XGS-01231] c14 N70-41676

CARDIAC VENTRICLES

Contour detector and data acquisition system for the left ventricular outline
[NASA-CASE-ARC-10985-1] c52 N77-17701

CARDIOGRAPHY

Digital cardiometer incorporating circuit for measuring heartbeat rate of subject over predetermined portion of one minute also converting rate to beats per minute
[NASA-CASE-XMS-02399] c05 N71-22896
Reference apparatus for medical ultrasonic transducer
[NASA-CASE-AFC-10753-1] c54 N75-27760

CARDIOLOGY

Development of instantaneous reading tachometer for measuring electrocardiogram signal rate
[NASA-CASE-HFS-20418] c14 N73-24473
Myocardium wall thickness transducer and measuring method
[NASA-CASE-NFO-13644-1] c52 N76-29895

CARDIOTACHOMETERS

Digital computing cardiometer
[NASA-CASE-HFS-20284-1] c52 N74-12778

CARDIOVASCULAR SYSTEM

Ear oximeter for monitoring blood oxygenation and pressure, pulse rate, and pressure pulse curve, using dc and ac amplifiers
[NASA-CASE-XAC-05422] c04 N71-23185
Catheter tip force transducer for cardiovascular research
[NASA-CASE-NFO-13643-1] c52 N76-29896

CARRIER FREQUENCIES

Demodulator for simultaneous demodulation of two modulating ac signal carriers close in frequency
[NASA-CASE-XMP-01160] c07 N71-11298
Automatic carrier acquisition system for phase locked loop receiver
[NASA-CASE-NFO-11628-1] c07 N73-30113
Demodulator for carrier transducers
[NASA-CASE-NUC-10107-1] c33 N74-17930
Decision feedback loop for tracking a polyphase modulated carrier
[NASA-CASE-NFO-13103-1] c32 N74-20811
Swept group delay measurement
[NASA-CASE-NFO-13909-1] c33 N77-17358

CARRIER WAVES

Variable frequency subcarrier oscillator with temperature compensation
[NASA-CASE-XNP-03916] c09 N71-28810
Modulator for tone and binary signals --- phase of modulation of tone and binary signals on carrier waves in communication systems
[NASA-CASE-GSC-11743-1] c32 N75-24981

CARRIERS

Sealed storage container for channel carriers with mounted miniature electronic components
[NASA-CASE-HFS-20075] c09 N71-26133
Apparatus for conducting flow electrophoresis in the substantial absence of gravity
[NASA-CASE-HFS-21394-1] c34 N74-27744

CARTESIAN COORDINATES

Design and development of random function tracer for obtaining coordinates of points on contour maps
[NASA-CASE-XLA-01401] c15 N71-21179

CARTRIDGES

Tape cartridge with high capacity storage of endless-loop magnetic tape
[NASA-CASE-XGS-00769] c14 N70-41647
Endless loop tape transport mechanism for driving and tensioning recording medium in magnetic tape recorder
[NASA-CASE-XGS-01223] c07 N71-10609
Catalyst cartridge for carbon dioxide reduction unit

[NASA-CASE-LAR-10551-1] c25 N74-12813

CASCADE CONTROL

Reversible ring counter using cascaded single silicon controlled rectifier stages
[NASA-CASE-XGS-01473] c09 N71-10673
Synchronous dc direct-drive system comprising multiple-loop hybrid control system controlling load directly connected to actuator
[NASA-CASE-GSC-10065-1] c10 N71-27136
Multiloop RC active filter network with low parameter sensitivity and low amplifier gain
[NASA-CASE-ARC-10192] c09 N72-21245

CASCADE FLOW

Cascade plug nozzle --- for jet noise reduction
[NASA-CASE-LAR-11674-1] c07 N76-18117

CASES (CONTAINERS)

Nonmagnetic hermetically sealed battery case made of epoxy resin and woven glass tape for use with electrochemical cells in spacecraft
[NASA-CASE-XGS-00886] c03 N71-11053
Protected isotope heat source --- for atmospheric reentry protection and heat transmission to spacecraft
[NASA-CASE-LEW-11227-1] c73 N75-30876

CASSEGRAIN ANTENNAS

Cassegrain antenna subreflector flange for suppressing ground noise and increasing antenna transmitting efficiency
[NASA-CASE-XNP-00683] c09 N70-35425
Design and operation of multi-feed cone Cassegrain antenna
[NASA-CASE-NFO-10539] c07 N71-11285
Synchronous detection system for detecting weak radio astronomical signals
[NASA-CASE-XNP-09832] c30 N71-23723
Dual frequency feed systems for Cassegrainian antennas
[NASA-CASE-NFO-13091-1] c09 N73-12214
Low loss dichroic plate
[NASA-CASE-NFO-13171-1] c32 N74-11000

CASTING

Hydraulic apparatus for casting and molding of liquid polymers
[NASA-CASE-XNP-07659] c06 N71-22975

CASTINGS

Method of making an apertured casting --- using duplicate mold
[NASA-CASE-LEW-11169-1] c37 N76-23570

CATALYSIS

Unit for generating thrust from catalytic decomposition of hydrogen peroxide, for high altitude aircraft or spacecraft reaction control
[NASA-CASE-XMS-00583] c28 N70-38504
Apparatus for photon excited catalysis
[NASA-CASE-NFO-13566-1] c25 N77-32255

CATALYSTS

Catalyst for increased growth of boron carbide crystal whiskers
[NASA-CASE-XBQ-03903] c15 N69-21922
Catalyst bed element removing tool
[NASA-CASE-XPR-00811] c15 N70-36901
Catalyst bed ignition system for hydrazine propellants
[NASA-CASE-XNP-00876] c28 N70-41311
Development of device for detecting hydrogen in ambient environments
[NASA-CASE-HFS-11537] c14 N71-20442
Catalyst cartridge for carbon dioxide reduction unit
[NASA-CASE-LAR-10551-1] c25 N74-12813
Process for removing sulfur dioxide from gas streams --- using iron as a catalyst
[NASA-CASE-HSC-16299-1] c45 N77-31668

CATALYTIC ACTIVITY

Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LEW-12053-1] c27 N74-34579
A process of forming catalytic surfaces for oxidation reactions
[NASA-CASE-HSC-14831-1] c25 N76-23387
Transducer circuit design with single coaxial cable for input and output connections including incorporation into miniaturized catheter transducer
[NASA-CASE-ARC-10132-1] c09 N71-24597

- Catheter tip force transducer for cardiovascular research
[NASA-CASE-WFO-13643-1] c52 N76-29896
- CATHODE RAY TUBES**
- Cathode ray oscilloscope for analyzing electrical waveforms representing amplitude distribution of time function
[NASA-CASE-XNP-01383] c09 N71-10659
- Cathode ray tube system for displaying ones and zeros in binary wave train
[NASA-CASE-XGS-04987] c08 N71-20571
- Indexing mechanism for cathode array substitution in electron beam tube
[NASA-CASE-WFO-10625] c09 N71-26182
- Color television system utilizing single gun current sensitive color cathode ray tube
[NASA-CASE-ERC-10098] c09 N71-28618
- Digital video system for displaying image and alphanumeric data on cathode ray tube
[NASA-CASE-WFO-11342] c09 N72-25248
- Switching circuit for control of cathode ray tube beam with fast rise time for output signal
[NASA-CASE-XSC-10647-1] c10 N72-31273
- Situational display system of cathode ray tubes to assist pilot in aircraft control
[NASA-CASE-ERC-10350] c14 N73-20474
- Very high intensity light source using a cathode ray tube --- electron beams
[NASA-CASE-XNP-01296] c33 N75-27250
- CATHODES**
- Encapsulated heater forming hollow body for cathode used in ion thruster
[NASA-CASE-LEW-10814-1] c28 N70-35422
- Electronic cathodes for use in electron bombardment ion thrusters
[NASA-CASE-XLE-04501] c09 N71-23190
- Design and characteristics of heat activated electric cell with anode made from one or more alkali metals and cathode made from oxidizing material
[NASA-CASE-LEW-11358] c03 N71-26084
- Characteristics of ion rocket engine with combination keeper electrode and electron baffle
[NASA-CASE-WFO-11880] c28 N73-24783
- Storage battery comprising negative plates of a wedge shaped configuration --- for preventing shape change induced malfunctions
[NASA-CASE-WFO-11806-1] c44 N74-19693
- CATIONS**
- Water insoluble, cationic permselective membrane
[NASA-CASE-WFO-11091] c18 N72-22567
- CAVITATION FLOW**
- Semitoroidal diaphragm cavitating flow control valve
[NASA-CASE-XNP-09704] c12 N71-18615
- CAVITIES**
- Black body radiometer having isothermally surrounded cavity for ultraviolet, visible, and infrared radiation
[NASA-CASE-WFO-10810] c14 N71-27323
- Method for coating through-holes in ceramic substrates used in fabricating miniaturized electronic circuits
[NASA-CASE-XNP-05999] c15 N71-29032
- Soil burrowing mole apparatus
[NASA-CASE-XNP-07169] c15 N73-32362
- Method of constructing dished ion thruster grids to provide hole array spacing compensation
[NASA-CASE-LEW-11876-1] c20 N76-21276
- Method of making hollow elastomeric bodies
[NASA-CASE-WFO-13535-1] c37 N76-31524
- CAVITY RESONATORS**
- Helical coaxial resonator RF filter
[NASA-CASE-XGS-02816] c07 N69-24323
- Semiconductor in resonant cavity for improving signal to noise ratio of communication receiver
[NASA-CASE-MSC-12259-1] c07 N70-12616
- Thermally sensitive tuning probe for nullifying detuning effects in microwave cavity resonator of amplifier
[NASA-CASE-XNP-00449] c14 N70-35220
- Holider for high frequency crystal resonators
[NASA-CASE-XNP-03637] c15 N71-21311
- Superconductive resonant cavity for improved signal to noise ratio in communication signal
[NASA-CASE-MSC-12259-2] c07 N72-33146
- Infrared tunable dye laser with nonlinear wavelength mixing crystal in optical cavity
[NASA-CASE-ARC-10463-1] c09 N73-32111
- Tunable cavity resonator with ramp shaped supports
[NASA-CASE-HQN-10790-1] c36 N74-11313
- CELESTIAL BODIES**
- Device for determining relative angular position of spacecraft and radiating celestial body
[NASA-CASE-GSC-11444-1] c14 N73-28490
- Position determination systems --- using orbital antenna scan of celestial bodies
[NASA-CASE-MSC-12593-1] c17 N76-21250
- CELESTIAL NAVIGATION**
- Development of star intensity measuring system which minimizes effects of outside interference
[NASA-CASE-XNP-06510] c14 N71-23797
- CELL ANODES**
- Heat activated emf cells with aluminum anode
[NASA-CASE-LEW-11359] c03 N71-28579
- Heat activated cell with aluminum anode
[NASA-CASE-LEW-11359-2] c03 N72-20034
- Electrically rechargeable REDOX flow cell
[NASA-CASE-LEW-12220-1] c44 N77-14581
- CELL DIVISION**
- Process for control of cell division
[NASA-CASE-LAR-10773-3] c51 N77-25769
- CELLS**
- Separation cell with permeable membranes for fluid mixture component separation
[NASA-CASE-IMS-02952] c18 N71-20742
- CELLS (BIOLOGY)**
- System for and method of freezing biological tissue
[NASA-CASE-GSC-12173-1] c52 N77-27693
- CEMENTS**
- Graphite reinforced bone cement
[NASA-CASE-WFO-13764-1] c24 N76-26281
- CENTRIFUGES**
- Centrifuge mounted motion simulator with elevator mechanism
[NASA-CASE-XAC-00399] c11 N70-34815
- Liquid-gaseous centrifugal separator for weightlessness environment
[NASA-CASE-XLA-00415] c15 N71-16079
- Centrifugal lyophobic separator
[NASA-CASE-LAR-10194-1] c34 N74-30608
- Fluid control apparatus and method
[NASA-CASE-LAR-11110-1] c34 N75-26282
- CERAMIC BONDING**
- Plasma spraying gun for forming diffusion bonded metal or ceramic coatings on substrates
[NASA-CASE-XLE-01604-2] c15 N71-15610
- Method of forming ceramic to metal seals impervious to gaseous and liquid mercury at high temperature
[NASA-CASE-XNP-01263-2] c15 N71-26312
- CERAMIC COATINGS**
- Evaporating crucible of tantalum-tungsten foil, nickel alumina bonding agent, and ceramic coating
[NASA-CASE-XLA-03105] c15 N69-27483
- Unfired-ceramic, highly reflective composite insulation for large launch vehicles
[NASA-CASE-XNP-01030] c18 N70-41583
- Unfired ceramic insulation for protection from radiant heating environments
[NASA-CASE-WFS-14253] c33 N71-24858
- Cermet for nuclear fuel constructed by pressing metal coated ceramic particles in die at temperature to cause bonding of metal coatings, and tested for thermal stability
[NASA-CASE-LEW-10219-1] c18 N71-28729
- Two-component ceramic coating for silica insulation
[NASA-CASE-MSC-14270-1] c27 N76-22377
- Three-component ceramic coating for silica insulation
[NASA-CASE-MSC-14270-2] c27 N76-23426
- CERAMIC NUCLEAR FUELS**
- Cermet for nuclear fuel constructed by pressing metal coated ceramic particles in die at temperature to cause bonding of metal coatings, and tested for thermal stability
[NASA-CASE-LEW-10219-1] c18 N71-28729
- CERAMICS**
- Transpiration cooled turbine blade made from metallic or ceramic wires
[NASA-CASE-XLE-00020] c15 N70-33226
- Characteristics of foamed-in-place ceramic refractory insulating material and method of fabrication
[NASA-CASE-XGS-02435] c18 N71-22998

- Process for fiberizing ceramic materials with high fusion temperatures and tensile strength [NASA-CASE-XNP-00597] c18 N71-23088
- Method for coating through-holes in ceramic substrates used in fabricating miniaturized electronic circuits [NASA-CASE-XNP-05999] c15 N71-29032
- Extrusion can for extruding ceramics under heat and pressure [NASA-CASE-NPO-10812] c15 N73-13464
- Thermal shock resistant hafnia ceramic materials [NASA-CASE-LAR-10894-1] c18 N73-14584
- Insulation foil and method of making [NASA-CASE-LEW-11484-2] c24 N75-14839
- Thermal shock and erosion resistant tantalum carbide ceramic material [NASA-CASE-LAR-11902-1] c27 N76-23436
- Improved nozzle for use with abrasive and/or corrosive materials [NASA-CASE-NPO-13823-1] c37 N77-17466
- Thermal insulation attaching means --- adhesive bonding of felt vibration isolators under ceramic tiles [NASA-CASE-NSC-12619-2] c16 N77-31237
- CERMETS**
- Freeze casting of metal ceramic and refractory compound powders into plastic slips [NASA-CASE-XLF-00106] c15 N71-16076
- Cermet for nuclear fuel constructed by pressing metal coated ceramic particles in die at temperature to cause bonding of metal coatings, and tested for thermal stability [NASA-CASE-LEW-10219-1] c18 N71-28729
- Cermet composition and method of fabrication --- heat resistant alloys and powders [NASA-CASE-NPO-13120-1] c27 N76-15311
- High temperature oxidation resistant cermet compositions [NASA-CASE-NPO-13666-1] c27 N77-13217
- CESIUM**
- Heated tungsten filter for removing oxygen impurities from cesium [NASA-CASE-XNP-04262-2] c17 N71-26773
- Method of producing I-123 --- by bombardment of cesium causing spallation [NASA-CASE-LEW-11390-2] c25 N76-27383
- CESIUM DIODES**
- Oxygen-doped tantalum emitter for thermionic devices such as cesium vapor diodes [NASA-CASE-NPO-11138] c03 N70-34646
- Thermionic cesium diode converter with cavity emitters [NASA-CASE-NPO-10412] c09 N71-28421
- CESIUM ENGINES**
- Variable thrust ion engine using thermal decomposition of solid cesium compound to produce propulsive vapor [NASA-CASE-XNP-00923] c28 N70-36802
- Method for producing porous tungsten plates for ionizing cesium compounds for propulsion of ion engines [NASA-CASE-XLE-00455] c28 N70-38197
- CESIUM VAPOR**
- Electric power generation system directory from laser power [NASA-CASE-NPO-13308-1] c36 N75-30524
- Cesium thermionic converters having lanthanum hexaboride electrodes [NASA-CASE-LEW-12038-2] c44 N77-32595
- CHANNEL FLOW**
- Fabrication method for lightweight regeneratively cooled combustion chamber of channel construction [NASA-CASE-XLE-00150] c28 N70-41818
- Heated element sensor for fluid flow detection in thermal conductive conduit with adaptive means to determine flow rate and direction [NASA-CASE-NSC-12084-1] c12 N71-17569
- CHANNELS (DATA TRANSMISSION)**
- Error correction circuitry for binary signal channels [NASA-CASE-XNP-03263] c09 N71-18843
- Helical recorder for multiple channel recording [NASA-CASE-GSC-10614-1] c09 N72-11224
- Asynchronous, multiplexing, single line transmission and recovery data system --- for satellite use [NASA-CASE-NPO-13321-1] c32 N75-26195
- CHARACTER RECOGNITION**
- Automatic character skew and spacing checking network --- of digital tape drive systems [NASA-CASE-GSC-11925-1] c33 N76-18353
- CHARGE DISTRIBUTION**
- Operation of vidicon tube for scanning spatial charge density pattern [NASA-CASE-XNP-06028] c09 N71-23189
- Charge storage diode modulators and demodulators [NASA-CASE-NPO-10189-1] c33 N77-21314
- CHARGE EXCHANGE**
- Ion beam thruster shield [NASA-CASE-LEW-12082-1] c20 N77-10148
- CHARGE TRANSFER**
- Electronic counter circuit utilizing magnetic core and low power consumption [NASA-CASE-XNP-08836] c09 N71-12515
- CHARGE TRANSFER DEVICES**
- Charge transfer reaction laser with preionization means [NASA-CASE-NPO-13945-1] c36 N77-19418
- CHARGED PARTICLES**
- Method of forming thin window drifted silicon charged particle detector [NASA-CASE-XLE-00808] c24 N71-10560
- Charged particle analyzer with periodically varying voltage applied across electrostatic deflection members [NASA-CASE-XAC-05506-1] c24 N71-16095
- Electrostatic charged particle collector containing stacked electrodes for microwave tube [NASA-CASE-LEW-11192-1] c09 N73-13208
- Method and apparatus for neutralizing potentials induced on spacecraft surfaces [NASA-CASE-GSC-11963-1] c33 N77-10429
- CHARGING**
- Development of device for simulating charge and discharge cycle of battery in synchronous orbit [NASA-CASE-GSC-11211-1] c03 N72-25020
- CHARRING**
- Sensor device with switches for measuring surface recession of charring and noncharring ablaters [NASA-CASE-XLA-01781] c14 N69-39975
- Ablation sensor for measuring char layer recession rate using electric wires [NASA-CASE-XLA-01794] c33 N71-21586
- CHECKOUT**
- Digital computer system for automatic prelaunch checkout of spacecraft [NASA-CASE-XKS-08012-2] c31 N71-15566
- Rapid activation and checkout device for batteries [NASA-CASE-NFS-22749-1] c44 N76-14601
- CHELATES**
- Ammonium perchlorate composite propellant with organic Cu/II/ chelate catalytic additive [NASA-CASE-LAR-10173-1] c27 N71-14090
- CHEMICAL ANALYSIS**
- Analytical test apparatus and method for determining oxygen content in alkali liquid metal [NASA-CASE-XLE-01997] c06 N71-23527
- Automated fluid chemical analyzer for microchemical analysis of small quantities of liquids by use of selected reagents and analyzer units [NASA-CASE-XNP-09451] c06 N71-26754
- Method for determining presence and type of OH in MgO [NASA-CASE-NPO-10774] c06 N72-17095
- Development and characteristics of injection system for use with gas chromatograph [NASA-CASE-ARC-10344-1] c14 N72-21433
- Micrometeoroid analyzer using arrays of interconnected capacitors and ion detector [NASA-CASE-ARC-10443-1] c14 N73-20477
- Chromato-fluorographic drug detector --- device for detecting and recording fluorescent properties of materials [NASA-CASE-ARC-10633-1] c25 N74-26947
- Amino acid analysis [NASA-CASE-NPO-12130-1] c25 N75-14844
- Gas chromatograph injection system [NASA-CASE-ARC-10344-2] c35 N75-26334
- CHEMICAL AUXILIARY POWER UNITS**
- Development and characteristics of ion-exchange membrane and electrode assembly for fuel cells or electrolysis cells [NASA-CASE-XMS-02063] c03 N71-29044

CHEMICAL COMPOSITION

- Rubber composition for expulsion bladders and diaphragms for use with hydrazine
[NASA-CASE-NFO-11433] c18 N71-31140
- Phototropic composition of matter with sensitivity to ultraviolet light and usable for producing positive photographic images
[NASA-CASE-XGS-03736] c14 N72-22443
- Frequency scanning particle size spectrometer
[NASA-CASE-NFO-13606-1] c35 N75-19627

CHEMICAL COMPOUNDS

- Ultraviolet chromatographic detector for quantitative and qualitative analysis of compounds
[NASA-CASE-HQN-10756-1] c14 N72-25428

CHEMICAL ELEMENTS

- Apparatus for remote handling of materials --- mixing or analyzing dangerous chemicals
[NASA-CASE-LAR-10634-1] c37 N74-18123

CHEMICAL ENGINEERING

- Process for the preparation of calcium superoxide
[NASA-CASE-ARC-11053-1] c25 N77-29252

CHEMICAL MACHINING

- Reusable masking boot for chemical machining operations
[NASA-CASE-XNP-02092] c15 N70-42033

CHEMICAL PROPERTIES

- Method for producing alternating ether-siloxane copolymers with stable properties when exposed to elevated temperatures and UV radiation
[NASA-CASE-XNP-02584] c06 N71-20905
- Chemical and physical properties of synthetic polyurethane polymer prepared by reacting hydroxy carbonate with organic diisocyanate
[NASA-CASE-MFS-10512] c06 N73-30099
- Chemical and elastic properties of fluorinated polyurethanes
[NASA-CASE-NPO-10767-1] c06 N73-33076
- Thiophenyl ether disiloxanes and trisiloxanes useful as lubricant fluids
[NASA-CASE-MFS-22411-1] c37 N74-21058

CHEMICAL REACTIONS

- Process for interfacial polymerization of pyromellitic dianhydride and tetraamino benzene
[NASA-CASE-XLA-03104] c06 N71-11235
- Synthesis of polymeric schiff bases by schiff-base exchange reactions
[NASA-CASE-IMP-08651] c06 N71-11236
- Preparation of ordered polyarylenesiloxane/polymers
[NASA-CASE-XNP-10753] c06 N71-11237
- Synthesis and chemical properties of imidazopyrrolone/imide copolymers
[NASA-CASE-XLA-08802] c06 N71-11238
- Composition and process for improving definition of resin masks used in chemical etching
[NASA-CASE-XGS-04993] c14 N71-17574
- Preparation of inorganic solid film lubricants with long wear life and stability in aerospace environments
[NASA-CASE-XNP-03988] c15 N71-21403
- Synthesis of high purity dianilinosilanes
[NASA-CASE-IMP-06409] c06 N71-23230
- Synthesis of aromatic diamines and dialdehyde polymers using Schiff base
[NASA-CASE-IMP-03074] c06 N71-24740
- Chemical synthesis of hydroxy terminated perfluoro ethers as intermediates for highly fluorinated polyurethane resins
[NASA-CASE-NPO-10768] c06 N71-27254
- Chemical synthesis of thermally stable organometallic polymers with divalent metal ion and tetraphenylphosphonitrilic units
[NASA-CASE-HQN-10364] c06 N71-27363
- Apparatus and process for volumetrically dispensing reagent quantities of volatile chemicals for small batch reactions
[NASA-CASE-NPO-10070] c15 N71-27372
- Infusible polymer production from reaction of polyfunctional epoxy resins with polyfunctional aziridine compounds
[NASA-CASE-NPO-10701] c06 N71-28620
- Process for preparing high molecular weight polyaryloxysilanes from lower molecular weight forms
[NASA-CASE-IMP-08674] c06 N71-28807
- Organometallic compounds of niobium and tantalum useful for film deposition
[NASA-CASE-XNP-04023] c06 N71-28808

- Description of method for making homogeneous foamed materials in weightless environment using materials having different physical properties
[NASA-CASE-XNP-09902] c15 N72-11387
- Method to produce high purity copper fluoride by heating copper hydroxyfluoride powder and subjecting to flowing fluorine gas
[NASA-CASE-LRW-10794-1] c06 N72-17093
- Pumping and metering dual piston system and monitor for reaction chamber constituents
[NASA-CASE-GSC-10218-1] c15 N72-21465
- Development of apparatus for producing metal powder particles of controlled size
[NASA-CASE-XLE-06461-2] c17 N72-28535
- Chemical spot tests for identification of titanium and titanium alloys used in aerospace vehicles
[NASA-CASE-LAR-10539-1] c17 N73-12547
- Self-cycling fluid heater for heating continuous fluid stream to ultrahigh temperatures to facilitate chemical reactions
[NASA-CASE-MSC-15567-1] c33 N73-16918
- Chemical process for production of polyisobutylene compounds and application as solid rocket propellant binder
[NASA-CASE-NFO-10893] c27 N73-22710
- Preparation of stable polyurethane polymer by reacting polymer with diisocyanate
[NASA-CASE-MFS-10506] c06 N73-30100
- Preparation of polyurethane polymer by reacting hydroxy polyformal with organic diisocyanate
[NASA-CASE-MFS-10509] c06 N73-30103
- Utilization of lithium p-lithiophenoxide to prepare star polymers
[NASA-CASE-NPO-10998-1] c06 N73-32029
- Polyimide foam for the thermal insulation and fire protection
[NASA-CASE-ARC-10464-1] c27 N74-12812
- Intumescent composition, foamed product prepared therewith and process for making same
[NASA-CASE-ARC-10304-2] c27 N74-27037
- Vapor phase growth of groups 3-5 compounds by hydrogen chloride transport of the elements
[NASA-CASE-LAR-11144-1] c25 N75-26043
- Utilization of oxygen difluoride for syntheses of fluoropolymers
[NASA-CASE-NPO-12061-1] c27 N76-16228
- Method for detecting pollutants --- through chemical reactions and heat treatment
[NASA-CASE-LAR-11405-1] c45 N76-31714

CHEMICAL TESTS

- Chemical spot tests for identification of titanium and titanium alloys used in aerospace vehicles
[NASA-CASE-LAR-10539-1] c17 N73-12547
- Chemical spot test for identifying magnesium or magnesium alloys used in aerospace applications
[NASA-CASE-LAR-10953-1] c17 N73-27446

CHIMNEYS

- Smokestack mounted airfoil
[NASA-CASE-LAR-11669-1] c34 N76-13419

CHLORINATION

- Chlorine generator for purifying water in life support systems of manned spacecraft
[NASA-CASE-XLA-08913] c14 N71-28933

CHLOROPRENE RESINS

- Flexible fire retardant polyisocyanate modified neoprene foam --- for thermal protective devices
[NASA-CASE-ARC-10180-1] c27 N74-12814
- Flame-resistant liquid oxygen compatible neoprene rubber composition
[NASA-CASE-KSC-11020-1] c27 N77-23267

CHOKES

- Current dependent variable inductance for input filter chokes of ac or dc power supplies
[NASA-CASE-ERC-10139] c09 N72-17154

CHOKES (RESTRICTIONS)

- Variably positioned guide vanes for aerodynamic choking
[NASA-CASE-LAR-10642-1] c07 N74-31270

CHOLESTEROL

- Reduction of blood serum cholesterol
[NASA-CASE-NPO-12119-1] c52 N75-15270

CHROMATOGRAPHY

- Chromato-fluorographic drug detector --- device for detecting and recording fluorescent properties of materials
[NASA-CASE-ARC-10633-1] c25 N74-26947

CHROMIUM ALLOYS

- Method of heat treating age-hardenable alloys
[NASA-CASE-XNP-01311] c26 N75-29236
- Reduced chromium stainless steel alloys
[NASA-CASE-LFW-12543-1] c26 N77-21217

CHROMOSOMES

- Automated clinical system for chromosome analysis
[NASA-CASE-NPO-13913-1] c52 N77-19750

CINEMATOGRAPHY

- High speed photo-optical time recorder for indicating time at exposure of each frame of high speed movie camera film
[NASA-CASE-KSC-10294] c14 N72-18411
- Holographic motion picture camera with Doppler shift compensation
[NASA-CASE-MFS-22517-1] c35 N76-18402

CIRCUIT BOARDS

- Electrical feedthrough connection for printed circuit boards
[NASA-CASE-XMF-01483] c14 N69-27431
- Electric connector for printed cable to printed cable or to printed board
[NASA-CASE-XMF-00369] c09 N70-36494
- Electrical connection for printed circuits on common board, using bellows principle in rivet
[NASA-CASE-XNP-05082] c15 N70-41960
- Electrical spot terminal assembly for printed circuit boards
[NASA-CASE-NPO-10034] c15 N71-17685
- Development and characteristics of polyimide impregnated laminates with fiberglass cloth backing for application as printed circuit boards
[NASA-CASE-MFS-20408] c18 N73-12604
- Techniques for packaging and mounting printed circuit boards
[NASA-CASE-MFS-21919-1] c10 N73-25243
- Tool for use in lifting pin supported objects
[NASA-CASE-NPO-13157-1] c37 N74-32918
- Shock absorbing mount for electrical components
[NASA-CASE-NPO-13253-1] c37 N75-18573
- Connector --- for connecting circuits on different layers of multilayer printed circuit boards
[NASA-CASE-LAR-11709-1] c37 N76-27567

CIRCUIT BREAKERS

- Interrupter switching device utilizing electrodes and mercury filled capillary tubes in which current flow vaporizes mercury as circuit breaker
[NASA-CASE-XNP-02251] c12 N71-20896
- Single electrical circuit component combining diode, fuse, and blown indicator with elongated tube of heat resistant transparent material
[NASA-CASE-XKS-03381] c09 N71-22796
- Electrical circuit selection device for simulating stage separation of flight vehicle
[NASA-CASE-XKS-04631] c10 N71-23663
- Electromagnetic braking arrangement for controlling rotor rotation in electric motor
[NASA-CASE-XNP-06936] c15 N71-24695
- Relay circuit breaker with magnetic latching to provide conductive and nonconductive paths for current devices
[NASA-CASE-MSC-11277] c09 N71-29008
- Multiple circuit protector device
[NASA-CASE-XMS-02744] c33 N75-27249

CIRCUIT DIAGRAMS

- Excitation and detection circuitry for flux responsive magnetic head
[NASA-CASE-XNP-04183] c09 N69-24329
- Impedance transformation device for signal mixing
[NASA-CASE-XGS-01110] c07 N69-24334
- Design of transistorized ring counter circuit with special steering and triggering circuits
[NASA-CASE-XGS-03095] c09 N69-27463
- Solid state switching circuit design to increase current capacity of low rated relay contacts
[NASA-CASE-XNP-09228] c09 N69-27500
- Extra-long monostable multivibrator employing bistable semiconductor switch to allow charging of timing circuit
[NASA-CASE-XGS-00381] c09 N70-34819
- Frequency shift keyed desmodulator - circuit diagrams
[NASA-CASE-XGS-02889] c07 N71-11282
- Difference indicating circuit used in conjunction with device measuring

- gravitational fields
[NASA-CASE-XNP-08274] c10 N71-13537
 - High voltage transistor circuit
[NASA-CASE-XNP-06937] c09 N71-19516
 - Control of fusion welding through use of thermocouple wire
[NASA-CASE-MFS-06074] c15 N71-20393
 - Circuitry for developing autocorrelation function continuously within signal receiving period
[NASA-CASE-XNP-00746] c07 N71-21476
 - Single electrical circuit component combining diode, fuse, and blown indicator with elongated tube of heat resistant transparent material
[NASA-CASE-XKS-03381] c09 N71-22796
 - Design and development of buck-boost voltage regulator circuit with additive or subtractive alternating current impressed on variable direct current source voltage
[NASA-CASE-GSC-10735-1] c10 N71-26085
 - Design of active RC network capable of operating at high Q values with reduced sensitivity to gain amplification and number of passive components
[NASA-CASE-ARC-10042-2] c10 N72-11256
 - Precision surface cutter for screen circuit negatives and other microcircuits
[NASA-CASE-XLA-09843] c15 N72-27485
 - Self-regulating proportionally controlled heating apparatus and technique
[NASA-CASE-GSC-11752-1] c77 N75-20140
 - Symmetrical odd-modulus frequency divider
[NASA-CASE-NPO-13426-1] c33 N75-31330
 - Trielectrode capacitive pressure transducer
[NASA-CASE-ARC-10711-2] c33 N76-21390
 - Frequency discriminator and phase detector circuit
[NASA-CASE-NPO-11515-1] c33 N77-13315
- CIRCUIT PROTECTION
- Use of silicon controlled rectifier shorting circuit to protect thermoelectric generator source from thermal destruction
[NASA-CASE-XGS-04808] c03 N69-25146
 - Spark gap type protective circuit for fast sensing and removal of overvoltage conditions
[NASA-CASE-XAC-08981] c09 N69-39897
 - Development of in-line fuse device for protection of electric circuits from excessive currents and voltages
[NASA-CASE-MSC-12135-1] c09 N71-12526
 - Overcurrent protecting circuit for push-pull transistor amplifiers
[NASA-CASE-MSC-12033-1] c09 N71-13531
 - Solder coating process for printed copper circuit protection
[NASA-CASE-XNP-01599] c09 N71-20705
 - Power supply with overload protection for series stage transistor
[NASA-CASE-XMS-00913] c10 N71-23543
 - Selective plating of etched circuits without removing previous plating
[NASA-CASE-XGS-03120] c15 N71-24047
 - Circuit design for failure sensing and protecting low voltage electric generator and power transmission networks
[NASA-CASE-GSC-10114-1] c10 N71-27366
 - Sensing circuit for instantaneous reaction to power overloads
[NASA-CASE-GSC-10667-1] c10 N71-33129
 - Current protection equipment for saturable core transformers
[NASA-CASE-ERC-10075-2] c09 N72-22196
 - Development of process for forming insulating layer between two electrical conductor or semiconductor materials
[NASA-CASE-LFW-10489-1] c15 N72-25447
 - Phase protection system for ac power lines
[NASA-CASE-MSC-17832-1] c33 N74-14956
 - Overvoltage protection network
[NASA-CASE-ARC-10197-1] c33 N74-17929
 - Shock absorbing mount for electrical components
[NASA-CASE-NPO-13253-1] c37 N75-18573
 - Multiple circuit protector device
[NASA-CASE-XMS-02744] c33 N75-27249
 - Multi-cell battery protection system
[NASA-CASE-LFW-12039-1] c44 N76-23713
 - Shielded conductor cable system
[NASA-CASE-MSC-12745-1] c33 N77-13338

CIRCUITS

Distribution of currents to circuits using electrical adaptor
[NASA-CASE-XLA-01288] c09 N69-21470

Nondestructive interrogating and state changing circuit for binary magnetic storage elements
[NASA-CASE-XGS-00174] c08 N70-34743

Electronic circuit system for controlling electric motor speed
[NASA-CASE-XMF-01129] c09 N70-38712

Starting circuit design for initiating and maintaining arcs in vapor lamps
[NASA-CASE-XNP-01058] c09 N71-12540

Voltage drift compensation circuit for analog-to-digital converter
[NASA-CASE-XNP-04780] c08 N71-19687

High voltage divider system for attenuating high voltages to convenient levels suitable for introduction to measuring circuits
[NASA-CASE-XLE-02008] c09 N71-21583

Negation of magnetic fields produced by thin waferlike circuit elements in space vehicles
[NASA-CASE-XGS-03390] c03 N71-23187

Circuits for controlling reversible dc motor
[NASA-CASE-XNP-07477] c09 N71-26092

Device for rapid adjustment and maintenance of temperature in electronic components
[NASA-CASE-XNP-02792] c14 N71-28958

Pulse generating circuit for operation at very high duty cycles and repetition rates
[NASA-CASE-XNP-00745] c10 N71-28960

Development of electric circuit for production of different pulse width signals
[NASA-CASE-XLA-07788] c09 N71-29139

Sensing circuit for instantaneous reaction to power overloads
[NASA-CASE-GSC-10667-1] c10 N71-33129

Pulsed excitation voltage circuit for strain gage bridge transducers
[NASA-CASE-FRC-10036] c09 N72-22200

Development of thermal to electric power conversion system using solid state switches of electrical currents to load for Seebeck effect compensation
[NASA-CASE-NPO-11388] c03 N72-23048

Inductive-capacitive loops as load insensitive power converters
[NASA-CASE-FRC-10268] c09 N72-25252

Fail-safe multiple transformer circuit configuration
[NASA-CASE-NPO-11078] c09 N72-25262

Precision surface cutter for screen circuit negatives and other microcircuits
[NASA-CASE-XLA-09843] c15 N72-27485

Bridge-type gain control circuit
[NASA-CASE-GSC-10786-1] c10 N72-28241

Active tuned circuits for microelectronic construction
[NASA-CASE-GSC-11340-1] c10 N72-33230

Thermochromic compositions for detecting heat levels in electronic circuits and devices
[NASA-CASE-NPO-10768-1] c14 N73-14428

Electrodeless lamp circuit driven by induction
[NASA-CASE-NFS-21214-1] c09 N73-30181

Circuit for detecting initial systole and diastolic notch --- for monitoring arterial pressure
[NASA-CASE-LEW-11581-1] c54 N75-13531

Peak holding circuit for extremely narrow pulses
[NASA-CASE-MSC-14129-1] c33 N75-18479

High voltage distributor
[NASA-CASE-GSC-11849-1] c33 N76-16332

CIRCULAR CONES
Optical apparatus for visual detection of roundness and regularity of cone surfaces
[NASA-CASE-XMF-00462] c14 N70-34298

CIRCULAR CYLINDERS
Modulating and controlling intensity of light beam from high temperature source by servocontrolled rotating cylinders
[NASA-CASE-XMS-04300] c09 N71-19479

CIRCULAR POLARIZATION
Left and right hand circular electromagnetic polarization excitation by phase shifter and hybrid networks
[NASA-CASE-GSC-10021-1] c09 N71-24595

Planar array circularly polarized antenna with wall slot excitation
[NASA-CASE-NPO-10301] c07 N72-11148

Circularly polarized antenna with linearly polarized pair of elements
[NASA-CASE-FRC-10214] c09 N72-31235

Dual frequency circularly polarized microwave integrated antenna
[NASA-CASE-MSC-16100-1] c32 N77-15233

CIRCULAR TUBES
Evacuated displacement compression molding
[NASA-CASE-LAR-10782-1] c31 N74-14133

CIRCULATORS (PHASE SHIFT CIRCUITS)
Development of electromagnetic wave transmission line circulator and application to parametric amplifier circuits
[NASA-CASE-XNP-02140] c09 N71-23097

CLAMPING CIRCUITS
Clamped amplifier circuit for horizon scanner enabling amplification and accurate measurement of specified parameters
[NASA-CASE-XGS-01784] c10 N71-20782

CLAMPS
Portable device for aligning surfaces of two adjacent wall or sheet sections for joining at point of junction
[NASA-CASE-XMF-01452] c15 N70-41371

Hydraulic clamping of sheet stock specimens
[NASA-CASE-XLA-05100] c15 N71-17696

Inertial component clamping assembly design for spacecraft guidance and control system mounting
[NASA-CASE-XMS-02184] c15 N71-20813

Design and development of module joint clamping device for application to solar array construction
[NASA-CASE-XNP-02341] c15 N71-21531

Quick attach mechanism for moving or stationary wires, ropes, or cables
[NASA-CASE-XPR-05421] c15 N71-22994

CLAYS
White paint production by heating impure aluminum silicate clay having low solar absorptance
[NASA-CASE-XNP-02139] c18 N71-24184

CLEAN ROOMS
Environmentally controlled suit for working in sterile chamber
[NASA-CASE-LAB-10076-1] c05 N73-20137

CLEANERS
Device for back purging thrust engines
[NASA-CASE-XMS-04826] c28 N71-28849

Noncontaminating swab with absorbent end covered with netted envelope to prevent egress of absorbent material
[NASA-CASE-NFS-18100] c15 N72-11390

CLEANING
Device for removing plastic dust cover from digital computer disk packs for inspection and cleaning
[NASA-CASE-LAR-10590-1] c15 N70-26819

CLEAR AIR TURBULENCE
Development of radiometric sensor to warn aircraft pilots of region of clear air turbulence along flight path
[NASA-CASE-FRC-10081] c14 N72-28437

Clear air turbulence detector
[NASA-CASE-NFS-21244-1] c36 N75-15028

CLIMBING FLIGHT
Aircraft indicator for pilot control of takeoff roll, climbout path and verticle flight path in poor visibility conditions
[NASA-CASE-XLA-00487] c14 N70-40157

CLINICAL MEDICINE
Process for preparing calcium phosphate salts for tooth repair
[NASA-CASE-FRC-10338] c04 N72-33072

Measurement of gas production of microorganisms --- using pressure sensors
[NASA-CASE-LAB-11326-1] c35 N75-33368

Production of I-123
[NASA-CASE-LEW-11390-3] c25 N76-29379

Automated clinical system for chromosome analysis
[NASA-CASE-NPO-13913-1] c52 N77-19750

A cervix-to-rectum measuring device in a radiation applicator for use in the treatment of cervical cancer
[NASA-CASE-GSC-12081-2] c52 N77-26796

CLOCKS
Time synchronization system for synchronizing clocks at remote locations with master clock using moon reflected coded signals
[NASA-CASE-NPO-10143] c10 N71-26326

- Circuit for measuring wide range of pulse rates by utilizing high capacity counter
[NASA-CASE-XNP-06234] c10 N71-27137
- Fault tolerant clock apparatus utilizing a controlled minority of clock elements
[NASA-CASE-MSC-12531-1] c35 N75-30504
- Clock setter
[NASA-CASE-LAR-11458-1] c35 N76-16392
- CLOSED CIRCUIT TELEVISION**
Spacecraft docking and alignment system --- using television camera system
[NASA-CASE-MSC-12559-1] c18 N76-14186
- CLOSED CYCLES**
Closed loop radio communication ranging system to determine distance between moving airborne vehicle and fixed ground station
[NASA-CASE-XNP-01501] c21 N70-41930
- Digital phase-locked loop
[NASA-CASE-GSC-11623-1] c33 N75-25040
- Lead-oxygen dc power supply system having a closed loop oxygen and water system
[NASA-CASE-MFS-23059-1] c44 N76-27664
- CLOSED ECOLOGICAL SYSTEMS**
Potable water reclamation from human wastes in zero-G environment
[NASA-CASE-XIA-03213] c05 N71-11207
- Spacecraft with artificial gravity and earthlike atmosphere
[NASA-CASE-LEW-11101-1] c31 N73-32750
- Regenerable device for scrubbing breathable air of CO₂ and moisture without special heat exchanger equipment
[NASA-CASE-MSC-14771-1] c54 N77-32722
- CLOSURES**
Design and characteristics of device for closing canisters under high vacuum conditions
[NASA-CASE-XIA-01446] c15 N71-21528
- Spacesuit torso closure
[NASA-CASE-ABC-11100-1] c54 N77-25784
- CLOUD CHAMBERS**
Heat transfer device
[NASA-CASE-MFS-22938-1] c34 N76-18374
- CLOUDS (METEOROLOGY)**
Development and characteristics of apparatus for measuring intensity of electric field in atmosphere
[NASA-CASE-KSC-10730-1] c14 N73-32318
- Electric field measuring and display system --- for cloud formations
[NASA-CASE-KSC-10731-1] c33 N74-27862
- CMOS**
A complementary DMOS-VMOS integrated circuit structure
[NASA-CASE-GSC-12190-1] c33 N77-29403
- COATING**
Solder coating process for printed copper circuit protection
[NASA-CASE-XNP-01599] c09 N71-20705
- High thermal emittance black surface coatings and process for applying to metal and metal alloy surfaces used in radiative cooling of spacecraft
[NASA-CASE-XIA-06199] c15 N71-24875
- Method for fabricating solar cells having integral collector grids
[NASA-CASE-LEW-12819-1] c44 N77-24593
- COATINGS**
Bonded solid lubricant coatings of calcium fluoride and binder for high temperature stability
[NASA-CASE-XNS-00259] c18 N70-36400
- Selective coating for solar panels --- energy policy
[NASA-CASE-LEW-12159-1] c44 N76-15603
- COAXIAL CABLES**
Design and development of device for cooling inner conductor of coaxial cable
[NASA-CASE-XNP-09775] c09 N71-20445
- Design and development of electric connectors for rigid and semirigid coaxial cables
[NASA-CASE-XNP-04732] c09 N71-20851
- Transducer circuit design with single coaxial cable for input and output connections including incorporation into miniaturized catheter transducer
[NASA-CASE-ABC-10132-1] c09 N71-24597
- Collapsible antenna boom and coaxial transmission line having inflatable inner tube
[NASA-CASE-MFS-20068] c07 N71-27191
- Vibration isolation system, using coaxial helical compression springs
[NASA-CASE-WFO-11012] c15 N72-11391
- Development and characteristics of hermetically sealed coaxial package for containing microwave semiconductor components
[NASA-CASE-GSC-10791-1] c15 N73-14469
- System for stabilizing cable phase delay utilizing a coaxial cable under pressure
[NASA-CASE-WFO-13138-1] c33 N74-17927
- Refrigerated coaxial coupling --- for microwave equipment
[NASA-CASE-WFO-13504-1] c33 N75-30430
- COAXIAL PLASMA ACCELERATORS**
Self-energized plasma compressor
[NASA-CASE-MFS-22145-2] c75 N76-17951
- COBALT ALLOYS**
High strength, corrosion resistant cobalt-based alloys for aerospace structures
[NASA-CASE-XLE-00726] c17 N71-15644
- High temperature cobalt-base alloy resistant to corrosion by liquid metals and to sublimation in vacuum environment
[NASA-CASE-XLE-02991] c17 N71-16025
- High temperature ferromagnetic cobalt-base alloy for electrical power generating equipment
[NASA-CASE-XLE-03629] c17 N71-23248
- Cobalt-tungsten alloys with superior strength at elevated temperatures
[NASA-CASE-LEW-10436-1] c17 N73-32415
- COCKPIT SIMULATORS**
Controlled visibility device for simulating poor visibility conditions in training pilots in instrument landing and flight procedures
[NASA-CASE-XPR-04147] c11 N71-10748
- CODERS**
Design and development of encoder/decoder system to generate binary code which is function of outputs of plurality of bistable elements
[NASA-CASE-WFO-10342] c10 N71-33407
- Biorthogonal encoder with modular design
[NASA-CASE-WFO-10629] c08 N72-18184
- Method and apparatus for decoding compatible convolutional codes
[NASA-CASE-MSC-14070-1] c32 N74-32598
- Digital plus analog output encoder
[NASA-CASE-GSC-12115-1] c62 N76-31946
- Twin-capacitive shaft angle encoder with analog output signal
[NASA-CASE-ABC-10897-1] c33 N77-31404
- CODING**
Description of error correcting methods for use with digital data computers and apparatus for encoding and decoding digital data
[NASA-CASE-XNP-02748] c08 N71-22749
- Apparatus and digital technique for coding rate data
[NASA-CASE-LAR-10128-1] c08 N73-20217
- Binary concatenated coding system
[NASA-CASE-MSC-14082-1] c60 N76-23850
- Differential pulse code modulation
[NASA-CASE-MSC-12506-1] c32 N77-12239
- COEFFICIENT OF FRICTION**
Static coefficient test method and apparatus
[NASA-CASE-GSC-11893-1] c35 N76-31489
- COENZYMES**
Bioassay of flavin coenzymes
[NASA-CASE-GSC-10565-1] c06 N72-25149
- COHERENT ELECTROMAGNETIC RADIATION**
Design of folded traveling wave maser structure
[NASA-CASE-XNP-05219] c16 N71-15550
- Development of focused image holography with extended sources
[NASA-CASE-EEC-10019] c16 N71-15551
- COHERENT LIGHT**
Hybrid holographic system using reference, transmitted, and reflected beams simultaneously
[NASA-CASE-MFS-20074] c16 N71-15565
- Development of apparatus for amplitude modulation of diode laser by periodic discharge of direct current power supply
[NASA-CASE-XNS-04269] c16 N71-22895
- Coherent light beam device and method for measuring gas density in vacuum chambers
[NASA-CASE-XER-11203] c14 N71-28994
- COHERENT RADIATION**
Design and development of multichannel laser remote control system using modulated helium-neon laser as transmitter and light

- collector as receiving antenna
[NASA-CASE-LAR-10311-1] c16 N73-16536
- Monitoring atmospheric pollutants with a heterodyne radiometer transmitter-receiver
[NASA-CASE-NFO-11919-1] c35 N74-11284
- Apparatus for scanning the surface of a cylindrical body
[NASA-CASE-NFO-11861-1] c36 N74-20009
- Optically detonated explosive device
[NASA-CASE-NFO-11743-1] c28 N74-27425
- Method and apparatus for generating coherent radiation in the ultra-violet region and above by use of distributed feedback
[NASA-CASE-NFO-13346-1] c36 N76-29575
- COINCIDENCE CIRCUITS**
Frequency measurement by coincidence detection with standard frequency
[NASA-CASE-MSC-14649-1] c33 N76-16331
- COLD CATHODES**
Cold cathode discharge tube with pressurized gas cell for meteoroid detection in space
[NASA-CASE-LAR-10483-1] c14 N73-32327
- COLD GAS**
Annular arc accelerator shock tube
[NASA-CASE-NPO-13528-1] c09 N77-10071
- COLD WORKING**
Cold metal hydroforming techniques using epoxy molds for counteracting creep or stretch
[NASA-CASE-XLE-05641-1] c15 N71-26346
- COLLAPSE**
Collapsible piston for hypervelocity gun
[NASA-CASE-MSC-13789-1] c11 N73-32152
- COLLECTION**
Automatic liquid inventory collecting and dispensing unit
[NASA-CASE-LAR-11071-1] c35 N75-19611
- COLLIMATION**
Long range laser traversing system
[NASA-CASE-GSC-11262-1] c36 N74-21091
- Optical alignment device
[NASA-CASE-ARC-10932-1] c74 N76-22993
- Spatial filter for Q-switched lasers
[NASA-CASE-LEW-12164-1] c36 N77-32478
- COLLIMATORS**
X ray collimating structure for focusing radiation directly onto detector
[NASA-CASE-XHQ-04106] c14 N70-40240
- Collimator for analyzing spatial location of near and distant sources of radiation
[NASA-CASE-MFS-20546-2] c14 N73-30389
- Multiplate focusing collimator --- for scanning small near radiation sources
[NASA-CASE-MFS-20932-1] c35 N75-19616
- COLLISION AVOIDANCE**
Cooperative Doppler radar system for avoiding midair collisions
[NASA-CASE-LAR-10403] c21 N71-11766
- Satellite aided aircraft collision avoidance system effective for large number of aircraft
[NASA-CASE-ERC-10090] c21 N71-24948
- Vertically stacked collinear array of independently fed omnidirectional antennas for use in collision warning systems on commercial aircraft
[NASA-CASE-LAR-10545-1] c09 N72-21244
- Economical satellite aided vehicle avoidance system for preventing midair collisions
[NASA-CASE-ERC-10419] c21 N72-21631
- Development and operating principles of collision warning system for aircraft accident prevention
[NASA-CASE-HQN-10703] c21 N73-13643
- Development and characteristics of electronic signalling system and data processing equipment for warning systems to avoid midair collisions between aircraft
[NASA-CASE-LAR-10717-1] c21 N73-30641
- Satellite aided vehicle avoidance system
[NASA-CASE-ERC-10419-1] c03 N75-30132
- COLLOIDAL GENERATORS**
Colloidal particle generator for electrostatic engine for propelling space vehicles
[NASA-CASE-XLE-00817] c28 N70-33265
- COLLOIDAL PROPELLANTS**
Colloidal particle generator for electrostatic engine for propelling space vehicles
[NASA-CASE-XLE-00817] c28 N70-33265
- Low density and low viscosity magnetic propellant for use under zero gravity conditions
[NASA-CASE-XLE-01512] c12 N70-40124
- Electrostatic microthrust propulsion system with annular slit colloid thruster
[NASA-CASE-GSC-10709-1] c28 N71-25214
- COLOR**
Chemical spot test for identifying magnesium or magnesium alloys used in aerospace applications
[NASA-CASE-LAR-10953-1] c17 N73-27446
- COLOR PHOTOGRAPHY**
Color photointerpretation of interference colors reflected from thin film oil-coated components in moving gases for gas flow visualization
[NASA-CASE-XNP-01779] c12 N71-20815
- COLOR TELEVISION**
Color television system utilizing single gun current sensitive color cathode ray tube
[NASA-CASE-ERC-10098] c09 N71-28618
- Color television system for allowing monochrome television camera to produce color pictures
[NASA-CASE-MSC-12146-1] c07 N72-17109
- Video tape recorder with scan conversion playback for color television signals
[NASA-CASE-NFO-10166-1] c07 N73-22076
- Full color hybrid display for aircraft simulators
[NASA-CASE-ARC-10903-1] c09 N76-10148
- Scan converting video tape recorder
[NASA-CASE-NFO-10166-2] c35 N76-16391
- System for producing chroma signals
[NASA-CASE-MSC-14683-1] c74 N77-18893
- COLOR VISION**
Color perception tester for testing color code perceptiveness of individuals
[NASA-CASE-KSC-10278] c05 N72-16015
- COLUMNS (PROCESS ENGINEERING)**
Micropacked column for rapid chromatographic analysis using low gas flow rates
[NASA-CASE-XNP-04816] c06 N69-39936
- COLUMNS (SUPPORTS)**
Lightweight structural columns --- for truss structures
[NASA-CASE-LAR-12095-1] c39 N77-27432
- COMBINATORIAL ANALYSIS**
Apparatus for computing square roots
[NASA-CASE-XGS-04768] c08 N71-19437
- COMBUSTION**
Device for detection of combustion light preceding gaseous explosions
[NASA-CASE-LAR-10739-1] c14 N73-16484
- COMBUSTION CHAMBERS**
Rocket chamber leak test fixture using tubular plug
[NASA-CASE-XPR-09479] c14 N69-27503
- Propellant injectors for rocket combustion chambers
[NASA-CASE-XLE-00103] c28 N70-33241
- Metal ribbon wrapped outer wall for regeneratively cooled combustion chamber
[NASA-CASE-XLE-00164] c15 N70-36411
- Apparatus for cooling and injecting hypersonic propellants into combustion chamber of small rocket engine
[NASA-CASE-XLE-00303] c15 N70-36535
- Ignition system for monopropellant combustion devices
[NASA-CASE-XNP-00249] c28 N70-38249
- Fabrication method for lightweight regeneratively cooled combustion chamber of channel construction
[NASA-CASE-XLE-00150] c28 N70-41818
- Rocket combustion chamber stability by controlling transverse instability during propellant combustion
[NASA-CASE-XLE-04603] c33 N71-21507
- Regenerative cooling system for rocket combustion chamber using coolant tubes in convergent-divergent nozzle
[NASA-CASE-XLE-04857] c28 N71-24968
- Rocket engine injector orifice to accommodate changes in density, velocity, and pressure, thereby maintaining constant mass flow rate of propellant into rocket combustion chamber
[NASA-CASE-XLE-03157] c28 N71-24736
- Coaxial injector for mixing liquid propellants within combustion chambers
[NASA-CASE-NFO-11095] c15 N72-25455
- Swirl can, full-annulus combustion chambers for high performance gas turbine engines
[NASA-CASE-LEW-11326-1] c23 N73-30665

- Method of electroforming a rocket chamber
[NASA-CASE-LEW-11118-1] c20 N74-32919
- Heat exchanger --- rocket combustion chambers
and cooling systems
[NASA-CASE-LEW-12252-1] c34 N75-19579
- Heat exchanger and method of making
[NASA-CASE-LEW-12441-1] c34 N75-19580
- Controlled separation combustor --- airflow
distribution in gas turbine engines
[NASA-CASE-LEW-11593-1] c20 N76-14190
- Fuel combustor
[NASA-CASE-LEW-12137-1] c20 N76-20215
- Direct heating surface combustor
[NASA-CASE-LEW-11877-1] c44 N76-28646
- Reduction of nitric oxide emissions from a
combustor
[NASA-CASE-ARC-10814-2] c25 N77-31260
- COMBUSTION CONTROL**
Pressurized gas injection for burning rate
control of solid propellants
[NASA-CASE-XLE-03494] c27 N71-21819
- COMBUSTION EFFICIENCY**
Fuel injection system for maximum combustion
efficiency of rocket engines
[NASA-CASE-XLE-00111] c28 N70-38199
- COMBUSTION PHYSICS**
Characteristics of solid propellant rocket
engine with controlled rate of thrust buildup
operating in vacuum environment
[NASA-CASE-NPO-11559] c28 N73-24784
- COMBUSTION PRODUCTS**
Contamination free separation nut eliminating
combustion products from ambient surroundings
generated by squib firing
[NASA-CASE-XGS-01971] c15 N71-15922
- Device for generating and controlling combustion
products for testing of fire detection system
[NASA-CASE-GSC-11095-1] c14 N72-10375
- System for minimizing internal combustion engine
pollution emission
[NASA-CASE-NPO-13402-1] c37 N76-18457
- COMBUSTION STABILITY**
Rocket combustion chamber stability by
controlling transverse instability during
propellant combustion
[NASA-CASE-XLE-04603] c33 N71-21507
- COMMAND AND CONTROL**
Multiple rate digital command detection system
with range clean-up capability
[NASA-CASE-NPO-13753-1] c32 N77-20289
- COMMAND MODULES**
Energy absorbing crew couch strut for Apollo
command module
[NASA-CASE-MSC-12279] c15 N72-17450
- COMMERCIAL AIRCRAFT**
Aircraft design concept
[NASA-CASE-LAB-11852-1] c05 N77-15027
- COMMUNICATING**
Communication between computers using two
identical communications links
[NASA-CASE-NPO-11161] c08 N72-25207
- COMMUNICATION**
Circuitry for developing autocorrelation
function continuously within signal receiving
period
[NASA-CASE-XNP-00746] c07 N71-21476
- Superconductive resonant cavity for improved
signal to noise ratio in communication signal
[NASA-CASE-MSC-12259-2] c07 N72-33146
- COMMUNICATION CABLES**
Method of making molded electric connector for
use with flat conductor cables
[NASA-CASE-XNP-03498] c15 N71-15986
- Process for making RF shielded cable connector
assemblies and resulting structures
[NASA-CASE-GSC-11215-1] c09 N73-28083
- Fiber distributed feedback laser
[NASA-CASE-NPO-13531-1] c36 N76-24553
- COMMUNICATION EQUIPMENT**
Multiplexed communication system design
including automatic correction of transmission
errors introduced by frequency spectrum shifts
[NASA-CASE-XNP-01306] c07 N71-20814
- Binary data decoding device for use at receiving
end of communication channel
[NASA-CASE-NPO-10118] c07 N71-24741
- Characteristics of data-aided carrier tracking
loop used for tracking carrier in angle
modulated communications system
[NASA-CASE-NPO-11282] c10 N73-16205
- Doppler compensated communication system for
locating supersonic transport position
[NASA-CASE-GSC-10087-4] c07 N73-20174
- Differential phase shift keyed communication
system
[NASA-CASE-MSC-14065-1] c32 N74-26654
- COMMUNICATION SATELLITES**
Erectable, inflatable, radio signal reflecting
passive communication satellite
[NASA-CASE-XIA-00210] c30 N70-40309
- Development of antenna system for spin
stabilized communication satellite for
simultaneous reception and transmission of data
[NASA-CASE-XGS-02607] c31 N71-23009
- Elimination of tracking occultation problems
occurring during continuous monitoring of
interplanetary missions by using Earth
orbiting communications satellite
[NASA-CASE-XAC-06029-1] c31 N71-24813
- Satellite radio communication system with remote
steerable antenna
[NASA-CASE-XNP-02389] c07 N71-28900
- Satellite aided vehicle avoidance system
[NASA-CASE-ERC-10419-1] c03 N75-30132
- Ultra stable frequency distribution system
[NASA-CASE-NPO-13836-1] c32 N76-31373
- COMMUTATION**
High speed low level voltage commutating switch
[NASA-CASE-XAC-00060] c09 N70-39915
- COMMUTATORS**
Rocket-borne aspect sensor consisting of
radiation sensor, apertured disk, commutator,
and counting circuits
[NASA-CASE-XGS-08266] c14 N69-27432
- Commutator for steering precisely controlled
bidirectional currents through numerous loads
by use of magnetic core shift registers
[NASA-CASE-NPO-10743] c08 N72-21199
- COMPARATOR CIRCUITS**
Describing frequency discriminator using digital
logic circuits and supplying single binary
output signal
[NASA-CASE-MFS-14322] c08 N71-18692
- Development of pulsed differential comparator
circuit
[NASA-CASE-XLE-03804] c10 N71-19471
- Window comparator
[NASA-CASE-FRC-10090-1] c33 N77-11296
- COMPARATORS**
Photometric flow meter with comparator reference
means
[NASA-CASE-XGS-01331] c14 N71-22996
- Characteristics of comparator circuits for
comparison of binary numbers in information
processing system
[NASA-CASE-XNP-04819] c08 N71-23295
- COMPENSATORS**
Star image motion compensator using telescope
for maintaining fixed images
[NASA-CASE-LAB-10523-1] c14 N72-22444
- COMPONENTS**
Spherical bearing
[NASA-CASE-MFS-23447-1] c37 N77-11403
- COMPOSITE MATERIALS**
High strength reinforced metallic composites for
applications over wide temperature range
[NASA-CASE-XLE-02428] c17 N70-33288
- Method for producing fiber reinforced metallic
composites with high strength and elasticity
over wide temperature range
[NASA-CASE-XLE-00231] c17 N70-38198
- Composites reinforced with short metal fibers or
whiskers and having high tensile strength
[NASA-CASE-XLE-00228] c17 N70-38490
- Unfired-ceramic, highly reflective composite
insulation for large launch vehicles
[NASA-CASE-XNP-01030] c18 N70-41583
- Freeze casting of metal ceramic and refractory
compound powders into plastic slips
[NASA-CASE-XLE-00106] c15 N71-16076
- Preparation and characteristics of lightweight
refractory insulation
[NASA-CASE-XNP-05279] c18 N71-16124
- Flexible composite membrane structure impervious
to extremely reactive chemicals in rocket

COMPOSITE PROPELLANTS

propellants
[NASA-CASE-XNP-08837] c18 N71-16210
Cryostat for flexure fatigue testing of
composite materials
[NASA-CASE-XNP-02964] c14 N71-17659
Description of method for producing metallic
composites reinforced with ceramic and
refractory hard metals that are fibered in place
[NASA-CASE-XLE-03925] c18 N71-22894
Electrically coupled individually encapsulated
solar cell matrix
[NASA-CASE-NPO-11190] c03 N71-34044
Heat treatment and tooling for forming shapes
from thermosetting honeycomb core sheets
[NASA-CASE-NPO-11036] c15 N72-24522
Method for making fiber composites with high
strength at high temperatures
[NASA-CASE-LEW-10424-2-2] c18 N72-25539
Development of thermal compensating structure
which maintains uniform length with changes in
temperature
[NASA-CASE-MFS-20433] c15 N72-28496
Bearing material --- composite material with low
friction surface for rolling or sliding contact
[NASA-CASE-LEW-11930-1] c24 N76-22309
Fluid seal for rotating shafts
[NASA-CASE-LEW-11676-1] c37 N76-22541
Non-flammable elastomeric fiber from a
fluorinated elastomer and containing an
halogenated flame retardant
[NASA-CASE-MSC-14331-1] c27 N76-24405
Bearing material
[NASA-CASE-LEW-11930-2] c24 N76-26282
Intumescent-ablator coatings using endothermic
fillers
[NASA-CASE-ARC-11043-1] c34 N77-14372
Method of growing composites of the type
exhibiting the Soret effect --- improved
structure of eutectic alloy crystals
[NASA-CASE-MFS-22926-1] c24 N77-27187
Hybrid composite laminate structures
[NASA-CASE-LEW-12118-1] c24 N77-27188
Catalytic trimerization of aromatic nitriles and
triazyl-s-triazine ring cross-linked high
temperature resistant polymers and copolymers
made thereby
[NASA-CASE-LEW-12053-2] c23 N77-32244
Bearing material
[NASA-CASE-LEW-11930-3] c24 N77-32249
COMPOSITE PROPELLANTS
Ammonium perchlorate composite propellant with
organic Cu/II/ chelate catalytic additive
[NASA-CASE-LAR-10173-1] c27 N71-14090
Molded composite pyrogen igniter for rocket motors
[NASA-CASE-LAR-12018-1] c20 N76-29365
COMPOSITE STRUCTURES
Inflatable honeycomb panel element for
lightweight structures usable in space
stations and other construction
[NASA-CASE-XLA-00204] c32 N70-36536
Shrouded composite propulsion system configuration
[NASA-CASE-XLA-01043] c28 N71-10780
Development of composite structures for
spacecraft to serve as anti-meteoroid device
[NASA-CASE-LAR-10788-1] c31 N73-20880
Bonding method in the manufacture of continuous
regression rate sensor devices
[NASA-CASE-LAR-10337-1] c24 N75-30260
Varying density composite structure
[NASA-CASE-LAR-11181-1] c39 N75-31479
Leading edge protection for composite blades
[NASA-CASE-LEW-12550-1] c24 N77-19170
Composite lamination method --- of resin
impregnated fiber tape
[NASA-CASE-LAR-12019-1] c24 N77-22179
Composite sandwich lattice structure
[NASA-CASE-LAR-11898-2] c24 N77-26242
COMPOSITION (PROPERTY)
Moving particle composition analyzer
[NASA-CASE-GSC-11889-1] c35 N76-16393
Flame retardant elastomeric compositions
[NASA-CASE-MSC-14331-2] c27 N76-24408
Flame retardant elastomeric compositions
[NASA-CASE-MSC-14331-3] c27 N76-24409
COMPRESSED AIR
Actuator using compressed gas as driving force
to control valve handling large liquid flows
[NASA-CASE-IRQ-01208] c15 N70-35409

SUBJECT INDEX

COMPRESSED GAS
Gas compression analysis --- for oxygen supply
equipment
[NASA-CASE-MSC-14757-1] c37 N76-13496
COMPRESSIBLE FLUIDS
Capacitor for measuring density of compressible
fluid in liquid, gas, or liquid and gas phases
[NASA-CASE-XLE-00143] c14 N70-36618
Apparatus for tensile strength testing of
specimen by pressurized fluid
[NASA-CASE-XKS-06250] c14 N71-15600
COMPRESSING
Method and apparatus for producing very low
temperature refrigeration based on gas
pressure balance
[NASA-CASE-XNP-08877] c15 N71-23025
Method for compression molding of thermosetting
plastics utilizing a temperature gradient
across the plastic to cure the article
[NASA-CASE-LAR-10489-1] c31 N74-18124
COMPRESSION LOADS
Pressure transducer for systems for measuring
forces of compression
[NASA-CASE-NPO-10832] c14 N72-21405
Solid medium thermal engine
[NASA-CASE-ARC-10461-1] c44 N74-33379
COMPRESSION TESTS
Test equipment to prevent buckling of small
diameter specimens during compression tests
[NASA-CASE-LAR-10440-1] c14 N73-32323
Anti-buckling fatigue test assembly --- for
subjecting metal specimen to tensile and
compressive loads at constant temperature
[NASA-CASE-LAR-10426-1] c09 N74-19528
COMPRESSOR BLADES
Process for welding compressor and turbine
blades to rotors and discs of jet engines
[NASA-CASE-LEW-10533-1] c15 N73-28515
COMPRESSORS
Thermal pump-compressor for converting solar
energy
[NASA-CASE-XLA-00377] c33 N71-17610
Gas compression analysis --- for oxygen supply
equipment
[NASA-CASE-MSC-14757-1] c37 N76-13496
Self-energized plasma compressor
[NASA-CASE-MFS-22145-2] c75 N76-17951
COMPUTATION
Apparatus for computing square roots
[NASA-CASE-XGS-04768] c08 N71-19437
COMPUTER COMPONENTS
Computer circuit performing both counting and
shifting logic operations also capable of
miniaturization and integration in basic
circuits
[NASA-CASE-XNP-01753] c08 N71-22897
COMPUTER DESIGN
Two-dimensional radiant energy array computers
and computing devices
[NASA-CASE-GSC-11839-1] c60 N77-14751
COMPUTER GRAPHICS
System for digitizing graphic displays
[NASA-CASE-NPO-10745] c08 N72-22164
COMPUTER PROGRAMMING
Encoders designed to generate comma free
biorthogonal Reed-Muller type code comprising
conversion of 64 6-bit words into 64 32-bit
data for communication purposes
[NASA-CASE-NPO-10595] c10 N71-25917
Priority interrupt system --- comprised of four
registers
[NASA-CASE-NPO-13067-1] c60 N76-18800
COMPUTER PROGRAMS
Self testing and repairing computer comprising
control and diagnostic unit and rollback
points for error correction
[NASA-CASE-NPO-10567] c08 N71-24633
Development of computer program for estimating
reliability of self-repair and fault-tolerant
systems with respect to selected system and
mission parameters
[NASA-CASE-NPO-13086-1] c15 N73-12495
Development of flight simulator system to show
position of joystick displacement
[NASA-CASE-NPO-11497] c08 N73-25206
COMPUTER STORAGE DEVICES
Magnetic matrix memory system for nondestructive
reading of information contained in matrix
[NASA-CASE-XNP-05835] c08 N71-12504

- Binary sequence detector with few memory elements and minimized logic circuit complexity
[NASA-CASE-XNP-05415] c08 N71-12505
- Pulsed magnetic core memory element with blocking oscillator feedback for interrogation without loss of digital information
[NASA-CASE-XGS-03303] c08 N71-18595
- Reliable magnetic core circuit apparatus with application in selection matrices for digital memories
[NASA-CASE-XNP-01318] c10 N71-23033
- Time division multiplexed telemetry transmitting system controlled by programmed memory
[NASA-CASE-GSC-10131-1] c07 N71-24624
- Serial digital decoder design with square circuit matrix and serial memory storage units
[NASA-CASE-NPO-10150] c08 N71-24650
- Digital memory system with multiple switch cores for driving each word location
[NASA-CASE-XNP-01466] c10 N71-26434
- Redundant memory for enhanced reliability of digital data processing system
[NASA-CASE-GSC-10564] c10 N71-29135
- Memory device employing semiconductor and ferroelectric properties of single crystal barium titanate
[NASA-CASE-ERC-10307] c08 N72-21198
- Shared memory for a fault-tolerant computer
[NASA-CASE-NPO-13139-1] c60 N76-21914
- Lightning current waveform measuring system
[NASA-CASE-KSC-11018-1] c33 N77-21320
- COMPUTER SYSTEMS DESIGN**
- Adaptive voting computer system
[NASA-CASE-MSC-13932-1] c62 N74-14920
- Computer interface system
[NASA-CASE-NPO-13428-1] c60 N77-12721
- COMPUTER TECHNIQUES**
- Automated system for identifying traces of organic chemical compounds in aqueous solutions
[NASA-CASE-NPO-13063-1] c25 N76-18245
- Computerized system for translating a torch head
[NASA-CASE-MFS-23620-1] c37 N77-24497
- Apparatus for determining thermophysical properties of test specimens
[NASA-CASE-LAR-11883-1] c09 N77-27131
- COMPUTERIZED DESIGN**
- Simulator for practicing the mating of an observer-controlled object with a target
[NASA-CASE-MFS-23052-2] c14 N77-18179
- COMPUTERIZED SIMULATION**
- Integrated time shared instrumentation display for aerospace vehicle simulators
[NASA-CASE-XLA-01952] c08 N71-12507
- COMPUTERS**
- Telemetry data unit to form multibit words for use between demodulator and computer
[NASA-CASE-XNP-09225] c09 N69-24333
- Data compression processor for monitoring analog signals by sampling procedure
[NASA-CASE-NPO-10068] c08 N71-19288
- Communication between computers using two identical communications links
[NASA-CASE-NPO-11161] c08 N72-25207
- CONCAVITY**
- Concave grating spectrometer for use in near and vacuum ultraviolet regions
[NASA-CASE-XGS-01036] c14 N70-40003
- CONCENTRATORS**
- Concentrator device for controlling direction of solar energy onto energy converters
[NASA-CASE-XLE-01716] c09 N70-40234
- Thermostatically controlled non-tracking type solar energy concentrator
[NASA-CASE-NPO-13497-1] c44 N76-14602
- A non-tracking solar energy collector system
[NASA-CASE-NPO-13817-1] c44 N77-28583
- Three-dimensional tracking solar energy concentrator and method for making same
[NASA-CASE-NPO-13736-1] c44 N77-32583
- CONDENSATES**
- Apparatus for determining volatile condensable material present in polymeric products
[NASA-CASE-XNP-09699] c06 N71-24607
- Condensate removal device for heat exchanger
[NASA-CASE-MSC-14143-1] c77 N75-20139
- CONDENSERS (LIQUIFIERS)**
- Condenser-separator for dehumidifying air utilizing sintered metal surface
[NASA-CASE-XLA-08645] c15 N69-21465
- Condensate removal device for heat exchanger
[NASA-CASE-MSC-14143-1] c77 N75-20139
- CONDUCTING FLUIDS**
- Multiducted electromagnetic pump for conductive liquids
[NASA-CASE-NFO-10755] c15 N71-27084
- Internally supported flexible duct joint --- device for conducting fluids in high pressure systems
[NASA-CASE-MFS-19193-1] c37 N75-19686
- CONDUCTIVE HEAT TRANSFER**
- Measuring conductive heat flow and thermal conductivity of laminar gas stream in cylindrical plug to simulate atmospheric reentry
[NASA-CASE-XLE-00266] c14 N70-34156
- Space suit body heat exchanger design composed of thermal conductance yarn and liquid coolant loops
[NASA-CASE-XMS-09571] c05 N71-19439
- Compact pulsed laser having improved heat conductance
[NASA-CASE-NPO-13147-1] c36 N77-25502
- CONDUCTORS**
- Support for flexible conductor cable between drawers or racks holding electronic equipment and cabinet assembly housing drawers or racks
[NASA-CASE-XMF-07587] c15 N71-18701
- Method for making conductors for ferrite memory arrays --- from pre-formed metal conductors
[NASA-CASE-LAR-10994-1] c24 N75-13032
- CONES**
- Black body radiometer design with temperature sensing and cavity heat source cone winding
[NASA-CASE-XNP-09701] c14 N71-26475
- CONFINEMENT**
- Observation window for internal gas confining chamber
[NASA-CASE-NPO-10890] c11 N73-12265
- CONICAL BODIES**
- Conical valve plug for use with reactive cryogenic fluids
[NASA-CASE-XLE-00715] c15 N70-34859
- Conical reflector antenna with feed approximating line source
[NASA-CASE-NPO-10303] c07 N72-22127
- Characteristics of microwave antenna with conical reflectors to generate plane wave front
[NASA-CASE-NPO-11661] c07 N73-14130
- CONICAL SHELLS**
- Capacitance measuring device for determining flare accuracy on tapered tubes
[NASA-CASE-XKS-03495] c14 N69-39785
- Foldable, double cone and parabolic reflector system for solar ray concentration
[NASA-CASE-XLA-04622] c03 N70-41580
- Rotary spindle lathe attachments for machining geometrical cones
[NASA-CASE-XMS-04292] c15 N71-22722
- CONNECTORS**
- Expanding and contracting connector strip for solar cell array of Nimbus satellite
[NASA-CASE-XGS-01395] c03 N69-21539
- Design and development of quick release connector
[NASA-CASE-XLA-01141] c15 N71-13789
- Development and characteristics of strainer for flared tube fitting
[NASA-CASE-XLA-05056] c15 N72-11389
- Process for making RF shielded cable connector assemblies and resulting structures
[NASA-CASE-GSC-11215-1] c09 N73-28083
- CONSCIOUSNESS**
- Development of apparatus and method for quantitatively measuring brain activity as automatic indication of sleep state and level of consciousness
[NASA-CASE-MSC-13282-1] c05 N71-24729
- CONSTANTS**
- Spring operated accelerator and constant force spring mechanism therefor
[NASA-CASE-ARC-10898-1] c35 N77-18417
- CONSTRAINTS**
- Three stage motion restraining mechanism for restraining and damping three dimensional vibrational movement of gimballed package during launch of spacecraft
[NASA-CASE-GSC-10306-1] c15 N71-24694
- Cable guide and restraint device for reefing tubes in uniform manner
[NASA-CASE-LAR-10129-1] c15 N73-25512

CONSTRUCTION MATERIALS

SUBJECT INDEX

- Development of restraint system for securing personnel to ergometer while exercising under weightless conditions
[NASA-CASE-MFS-21046-1] c14 N73-27377
- Reefing system
[NASA-CASE-LAR-10129-2] c37 N74-20063
- CONSTRUCTION MATERIALS**
- Apparatus and method of assembling building blocks by folding pre-cut flat sheets of material during on-site construction
[NASA-CASE-MSC-12233-1] c15 N72-25454
- Development of construction block in form of container folded from flat sheet and filled with solid material for architectural purposes
[NASA-CASE-MSC-12233-2] c32 N73-13921
- CONTACT POTENTIALS**
- Lightweight, rugged, inexpensive satellite battery for producing electrical power from ionosphere using electrodes with different contact potentials
[NASA-CASE-XGS-01593] c03 N70-35408
- CONTACT RESISTANCE**
- Bearing material
[NASA-CASE-LEW-11930-3] c24 N77-32249
- CONTAINERLESS MELTS**
- Method of crystallization --- in gravity-free environments
[NASA-CASE-MFS-23001-1] c76 N77-32919
- CONTAINERS**
- Manufacture of fluid containers from fused coated polyester sheets having resealable septum
[NASA-CASE-NPO-10123] c15 N71-24835
- Method for locating leaks in hermetically sealed containers
[NASA-CASE-ERC-10045] c15 N71-24910
- Quantitative liquid measurements in container by resonant frequencies
[NASA-CASE-XNP-02500] c18 N71-27397
- CONTAMINANTS**
- Fluid transferring system design for purging toxic, corrosive, or noxious fluids and fumes from materials handling equipment for cleansing and accident prevention
[NASA-CASE-XMS-01905] c12 N71-21089
- CONTAMINATION**
- Emission spectroscopy method for contamination monitoring of inert gas metal arc welding
[NASA-CASE-XNP-02039] c15 N71-15871
- Contamination free separation nut eliminating combustion products from ambient surroundings generated by squib firing
[NASA-CASE-XGS-01971] c15 N71-15922
- Apparatus and process for volumetrically dispensing reagent quantities of volatile chemicals for small batch reactions
[NASA-CASE-NPO-10070] c15 N71-27372
- Portable tester for monitoring bacterial contamination by adenosine triphosphate light reaction
[NASA-CASE-GSC-10879-1] c14 N72-25413
- CONTINUOUS RADIATION**
- A CW ultrasonic bolt tensioning monitor
[NASA-CASE-LAR-12016-1] c32 N77-15236
- CONTINUOUS WAVE LASERS**
- High power laser apparatus and system
[NASA-CASE-XLE-2529-2] c36 N75-27364
- Continuous plasma laser --- method and apparatus for producing intense, coherent, monochromatic light from low temperature plasma
[NASA-CASE-XNP-04167-3] c36 N77-19416
- Stabilization of He2(a-3 Sigma(+)) molecules in liquid helium by optical pumping for vacuum UV laser
[NASA-CASE-NFO-13993-1] c36 N77-24468
- CONTINUOUS WAVE RADAR**
- Phase locked loop with sideband rejecting properties in continuous wave tracking radar
[NASA-CASE-XNP-02723] c07 N70-41680
- PM/CW radar system
[NASA-CASE-MFS-22234-1] c32 N76-33364
- CONTOURS**
- Describing device for surveying contour of surface using X-Y plotter and traveling transducer
[NASA-CASE-XLA-08646] c14 N71-17586
- Processing system for semiperiodic electrical signals to produce real time contoured display
[NASA-CASE-MSC-13407-1] c10 N72-20225
- Device for measuring the contour of a surface
[NASA-CASE-LAR-11869-1] c35 N77-10497
- Contour detector and data acquisition system for the left ventricular outline
[NASA-CASE-ARC-10985-1] c52 N77-17701
- CONTROL**
- Valve assembly for controlling simultaneously more than one fluid flow, and having stable qualities under loads
[NASA-CASE-XMS-05890] c09 N71-23191
- Control system for pressure balance device used in calibrating pressure gages
[NASA-CASE-XNP-04134] c14 N71-23755
- Failure detection and control means for improved drift performance of a gimballed platform system
[NASA-CASE-MFS-23551-1] c04 N76-26175
- CONTROL BOARDS**
- Ionization control system design for monitoring separately located ion gage pressures, on vacuum chambers
[NASA-CASE-XLE-00787] c14 N71-21090
- CONTROL DATA (COMPUTERS)**
- Computer interface system
[NASA-CASE-NPO-13428-1] c60 N77-12721
- CONTROL EQUIPMENT**
- Stepping motor control apparatus exciting windings in proper time sequence to cause motor to rotate in either direction
[NASA-CASE-GSC-10366-1] c10 N71-18772
- Voltage drift compensation circuit for analog-to-digital converter
[NASA-CASE-XNP-04780] c08 N71-19687
- Development of attitude control system for vertical takeoff aircraft using reaction nozzles displaced from various axes of aircraft
[NASA-CASE-XAC-08972] c02 N71-20570
- Device for controlling rotary potentiometer mounted on aircraft steering wheel or aileron control
[NASA-CASE-XAC-10019] c15 N71-23809
- Controlled release device for use in launching rockets or missiles
[NASA-CASE-XKS-03338] c15 N71-24043
- Circuits for controlling reversible dc motor
[NASA-CASE-XNP-07477] c09 N71-26092
- Digital memory system with multiple switch cores for driving each word location
[NASA-CASE-XNP-01466] c10 N71-26434
- Fluid control jet amplifiers
[NASA-CASE-XLE-09341] c12 N71-28741
- System for control of variable signal generator
[NASA-CASE-NPO-11064] c07 N72-11150
- Solid state remote circuit selector switching circuit
[NASA-CASE-LEW-10387] c09 N72-22201
- Development of device for simulating charge and discharge cycle of battery in synchronous orbit
[NASA-CASE-GSC-11211-1] c03 N72-25020
- Bridge-type gain control circuit
[NASA-CASE-GSC-10786-1] c10 N72-28241
- Interferometer prism and control system for precisely determining direction to remote light source
[NASA-CASE-ARC-10278-1] c14 N73-25463
- Digital controller for a Baum folding machine --- providing automatic counting and machine shutoff
[NASA-CASE-LAR-10688-1] c37 N74-21056
- Flow control valve --- for high temperature fluids
[NASA-CASE-NFO-11951-1] c37 N74-21065
- Variable ratio mixed-mode bilateral master-slave control system for shuttle remote manipulator system
[NASA-CASE-MSC-14245-1] c18 N75-27041
- Control for nuclear thermionic power source --- power supply circuits, energy policy
[NASA-CASE-NPO-13114-2] c44 N76-15573
- Illumination control apparatus for compensating solar light
[NASA-CASE-RSC-11010-1] c44 N77-15493
- Anthropomorphic master/slave manipulator system
[NASA-CASE-ARC-10756-1] c54 N77-32721
- CONTROL ROCKETS**
- Unit for generating thrust from catalytic decomposition of hydrogen peroxide, for high altitude aircraft or spacecraft reaction control
[NASA-CASE-XMS-00583] c28 N70-38504
- CONTROL RODS**
- Nuclear reactor control rod assembly with

improved driving mechanism
[NASA-CASE-XLE-00298] c22 N70-34501

Manual control mechanism for adjusting control
rod to null position
[NASA-CASE-XLA-01808] c15 N71-20740

CONTROL STABILITY
Design and development of active control system
for air cushion vehicle to reduce or eliminate
effects of excessive vertical vibratory
acceleration
[NASA-CASE-LAR-10531-1] c02 N73-13023

CONTROL SURFACES
Conical valve plug for use with reactive
cryogenic fluids
[NASA-CASE-XLE-00715] c15 N70-34859

Attitude control system for spacecraft based on
conversion of incident solar radiation on
movable control surfaces into mechanical torques
[NASA-CASE-XNP-02982] c31 N70-41855

Vortex-lift roll-control device
[NASA-CASE-LAR-11868-2] c08 N77-31176

CONTROL UNITS (COMPUTERS)
Self testing and repairing computer comprising
control and diagnostic unit and rollback
points for error correction
[NASA-CASE-NFO-10567] c08 N71-24633

CONTROL VALVES
Electromechanical actuator and its use in rocket
thrust control valve
[NASA-CASE-XNP-05975] c15 N69-23185

Multiple orifice fluid flow control valve to
provide different flow patterns
[NASA-CASE-ERC-10208] c15 N70-10867

Conical valve plug for use with reactive
cryogenic fluids
[NASA-CASE-XLE-00715] c15 N70-34859

Control valve and coaxial variable injector for
controlling bipropellant mixture ratio and flow
[NASA-CASE-XNP-09702] c15 N71-17654

Control valve for switching main stream of fluid
from one stable position to another by means
of electrohydrodynamic forces
[NASA-CASE-NFO-10416] c12 N71-27332

Force balanced throttle valve for fuel control
in rocket engines
[NASA-CASE-NFO-10808] c15 N71-27432

Dual stage check valve for cryogenic supply
systems used in space flight environmental
control system
[NASA-CASE-MSC-13587-1] c15 N73-30459

Airflow control system for supersonic inlets
[NASA-CASE-LFW-11188-1] c02 N74-20646

Ultrasonically bonded valve assembly
[NASA-CASE-NFO-13360-1] c37 N75-25185

Fluid valve assembly
[NASA-CASE-MSC-12731-1] c37 N76-26511

Pressure modulating valve
[NASA-CASE-MSC-14905-1] c37 N77-28487

CONTROLLED ATMOSPHERES
Rectangular electric conductors for conductor
cables to withstand spacecraft vibration and
controlled atmosphere
[NASA-CASE-MFS-14741] c09 N70-20737

High voltage pulse generator for testing flash
and ignition limits of nonmetallic materials
in controlled atmospheres
[NASA-CASE-MSC-12178-1] c09 N71-13518

System for continuous monitoring of exhalations,
weighing, and cage cleaning for animal exposed
to controlled atmosphere for toxic study
[NASA-CASE-XAC-05333] c11 N71-22875

CONTROLLERS
Unitary three-axis controller for flight
vehicles within or outside atmosphere
[NASA-CASE-XFR-00181] c21 N70-33279

Two axis flight controller with potentiometer
control shafts directly coupled to rotatable
ball members
[NASA-CASE-XFR-04104] c03 N70-42073

Hand controller operable about three
respectively perpendicular axes and capable of
actuating signal generators for attitude
control devices
[NASA-CASE-XMS-07487] c15 N71-23255

Solid state controller three axes controller
[NASA-CASE-MSC-12394-1] c08 N74-10942

Wide power range microwave feedback controller
[NASA-CASE-GSC-12146-1] c33 N77-21322

CONVECTIVE FLOW
Design and development of device to prevent
geysering during convective circulation of
cryogenic fluids
[NASA-CASE-KSC-10615] c15 N73-12486

CONVECTIVE HEAT TRANSFER
Thin film gauge --- for measuring convective
heat transfer rates along test surfaces in
wind tunnels
[NASA-CASE-NFO-10617-1] c35 N74-22095

CONVERGENCE
Electrical device for developing converging
spherical shock waves
[NASA-CASE-MFS-20890] c14 N72-22439

CONVERGENT NOZZLES
Nozzle extraction process and handmeter for
measuring handle
[NASA-CASE-LAR-12147-1] c27 N77-10198

CONVERGENT-DIVERGENT NOZZLES
Gimballed partially submerged nozzle for solid
propellant rocket engines for providing
directional control
[NASA-CASE-XNP-01544] c28 N70-34162

Regenerative cooling system for rocket
combustion chamber using coolant tubes in
convergent-divergent nozzle
[NASA-CASE-XLE-04857] c28 N71-23968

CONVERTERS
Scan converting video tape recorder
[NASA-CASE-NFO-10166-2] c35 N76-16391

Low intensity X-ray and gamma-ray imaging device
[NASA-CASE-GSC-12263-1] c35 N77-29471

COOLANTS
Simulated fuel assembly-type flow measurement
apparatus for coolant flow in reactor core
[NASA-CASE-XLE-00724] c14 N70-34669

COOLING
Microwave power receiving antenna solving heat
dissipation problems by construction of
elements as heat pipe devices
[NASA-CASE-MFS-20333] c09 N71-13486

Dissipative voltage regulator system for
minimizing heat dissipation
[NASA-CASE-GSC-10891-1] c10 N71-26626

Cooling and radiation protection of ruby lasers
using copper sulfate solution in alcohol
[NASA-CASE-MFS-20180] c16 N72-12440

Compact pulsed laser having improved heat
conductance
[NASA-CASE-NFO-13147-1] c36 N77-25502

Closed loop spray cooling apparatus
[NASA-CASE-LFW-11981-2] c34 N77-32434

COOLING SYSTEMS
Automatic thermal switch for improving
efficiency of cooling gases below 40 K
[NASA-CASE-XNP-03796] c23 N71-15467

Differential thermopile for measuring cooling
water temperature rise
[NASA-CASE-XAC-00812] c14 N71-15598

Electric power system with circulatory liquid
coolant cooling system
[NASA-CASE-MFS-14114-2] c09 N71-24807

Portable cryogenic cooling system design
including turbine pump, cooling chamber, and
atomizer
[NASA-CASE-NFO-10467] c23 N71-26654

Development and characteristics of natural
circulation radiator for use with nuclear
power plants installed in lunar space stations
[NASA-CASE-XHQ-03673] c33 N71-29046

Development and characteristics of cooling
system to maintain temperature of rack mounted
electronic modules
[NASA-CASE-MSC-12389] c33 N71-29052

Development of method for cooling high
temperature wall members with cooling medium
having high heat absorption capability
[NASA-CASE-HQM-00938] c33 N71-29053

Apparatus for liquid spray cooling of turbine
blades
[NASA-CASE-XLE-00027] c33 N71-29152

Radial heat flux transformer for use in heating
and cooling processes
[NASA-CASE-NFO-10828] c33 N72-17948

Light shield and cooling apparatus --- high
intensity ultraviolet lamp
[NASA-CASE-LAR-10089-1] c34 N74-23066

Heat exchanger --- rocket combustion chambers
and cooling systems

COORDINATES

SUBJECT INDEX

[NASA-CASE-LEW-12252-1] c34 N75-19579
Refrigerated coaxial coupling --- for microwave equipment

[NASA-CASE-NFO-13504-1] c33 N75-30430
Rocket chamber and method of making

[NASA-CASE-LEW-11118-2] c20 N76-14191
Closed loop spray cooling apparatus --- for particle accelerator targets

[NASA-CASE-LEW-11981-1] c37 N76-20486
Auxiliary power system for activity cooled aircraft

[NASA-CASE-LAR-11626-1] c34 N77-12332
An improved cooling system for removing metabolic heat from an hermetically sealed spacesuit

[NASA-CASE-ARC-11059-1] c54 N77-14743
Multistatic refrigeration system

[NASA-CASE-NPO-13839-1] c31 N77-15219
Tubular sublimatory evaporator heat sink

[NASA-CASE-ARC-10912-1] c34 N77-19353
Arc control in compact arc lamps

[NASA-CASE-NPO-10870-1] c33 N77-22386
Oil cooling system for a gas turbine engine

[NASA-CASE-LEW-12830-1] c07 N77-23106

COORDINATES

Mechanical coordinate converter for use with spacecraft tracking antennas

[NASA-CASE-XNP-00614] c14 N70-36907
System for locating lightning strokes by coordination of directional antenna signals

[NASA-CASE-KSC-10729-1] c09 N73-32110
Magnetic heading reference

[NASA-CASE-LAR-11387-2] c04 N77-19056

COPOLYMERS

Method for producing alternating ether-siloxane copolymers with stable properties when exposed to elevated temperatures and UV radiation

[NASA-CASE-XNP-02584] c06 N71-20905
Preparation of dicyanoacetylene and vinylidene copolymers using organic compounds

[NASA-CASE-XNP-03250] c06 N71-23500

COPPER

Development of method for etching copper

[NASA-CASE-IGS-06306] c17 N71-16044
Method of plating copper on aluminum to permit conventional soldering of structural aluminum bodies

[NASA-CASE-XLA-08966-1] c17 N71-25903
Brazing alloy composition

[NASA-CASE-XNP-06053] c26 N75-27126
Aluminum or copper substrate panel for selective absorption of solar energy and the method of producing said panel

[NASA-CASE-MFS-23518-1] c44 N77-31610

COPPER ALLOYS

Zirconium modified nickel-copper alloy

[NASA-CASE-LEW-12245-1] c26 N77-20201

COPPER COMPOUNDS

Gallium arsenide solar cell preparation by surface deposition of cuprous iodide on thin n-type polycrystalline layers and heating in iodine vapor

[NASA-CASE-XNP-01960] c09 N71-23027
Cooling and radiation protection of ruby lasers using copper sulfate solution in alcohol

[NASA-CASE-MFS-20180] c16 N72-12440
Brazing alloy

[NASA-CASE-XNP-03878] c26 N75-27127

COPPER FLUORIDES

Method to produce high purity copper fluoride by heating copper hydroxyfluoride powder and subjecting to flowing fluorine gas

[NASA-CASE-LEW-10794-1] c06 N72-17093

CORDAGE

Fabrication of root cord restrained fabric suit sections from sheets of fabric

[NASA-CASE-MSC-12398] c05 N72-20098

CORE STORAGE

Memory device employing semiconductor and ferroelectric properties of single crystal barium titanate

[NASA-CASE-EBC-10307] c08 N72-21198

CORES

Method of making rolling element bearings

[NASA-CASE-LEW-11087-2] c37 N74-15128
Electromagnetic transducer recording head having a laminated core section and tapered gap

[NASA-CASE-NFO-10711-1] c35 N77-21392

CORRECTION

Doppler frequency shift correction device for multiplex communication with Applications Technology Satellites

[NASA-CASE-IGS-02749] c07 N69-39978

CORRELATION DETECTION

Correlation type phase detector --- with time correlation integrator for frequency multiplexed signals

[NASA-CASE-GSC-11744-1] c33 N75-26243

CORRELATORS

Synchronous detection system for detecting weak radio astronomical signals

[NASA-CASE-XNP-09832] c30 N71-23723

Digital demodulator-correlator --- for ranging

[NASA-CASE-NFO-13982-1] c32 N77-24341

CORROSION PREVENTION

Vapor deposited laminated nitride-silicon coating for corrosion prevention of carbonaceous surfaces

[NASA-CASE-XLA-00284] c15 N71-16075

Method to prevent stress corrosion cracking in titanium alloys

[NASA-CASE-NPO-10271] c17 N71-16393

Method and apparatus for inducing compressive stresses in pressure vessel to prevent stress corrosion

[NASA-CASE-XLA-07390] c15 N71-18616

Development of fluoride coating to prevent oxidation of beryllium surfaces at elevated temperatures

[NASA-CASE-LEW-10327] c17 N71-33408

Prevention of hydrogen embrittlement of high strength steel by hydrazine compositions --- by adding potassium hydroxide to hydrazine

[NASA-CASE-NPO-12122-1] c24 N76-14203

CORROSION RESISTANCE

High strength, corrosion resistant cobalt-based alloys for aerospace structures

[NASA-CASE-XLR-00726] c17 N71-15644

Hydrazine monoperfluoro alkanoate solder flux leaving corrosion resistant coating, for metals such as copper

[NASA-CASE-XNP-03459-2] c18 N71-15688

High temperature cobalt-base alloy resistant to corrosion by liquid metals and to sublimation in vacuum environment

[NASA-CASE-XLR-02991] c17 N71-16025

Metal soldering with hydrazine monoperfluoro alkanoate for corrosion resistant coatings

[NASA-CASE-XNP-03459] c15 N71-21078

Improved nozzle for use with abrasive and/or corrosive materials

[NASA-CASE-NFO-13823-1] c37 N77-17466

COSINE SERIES

Service life of electromechanical device for generating sine/cosine functions

[NASA-CASE-LAR-10503-1] c09 N72-21248

Function generators for producing complex vibration mode patterns used to identify vibration mode data

[NASA-CASE-LAR-10310-1] c10 N73-20253

COSMIC DUST

Sensor for detecting and measuring energy, velocity and direction of travel of a cosmic dust particle

[NASA-CASE-GSC-10503-1] c14 N72-20381

System for detecting impact position of cosmic dust on detector surface

[NASA-CASE-GSC-11291-1] c25 N72-33696

Impact position detector for outer space particles

[NASA-CASE-GSC-11829-1] c35 N75-27331

Cosmic dust analyzer

[NASA-CASE-MSC-13802-2] c35 N76-15431

COST EFFECTIVENESS

Solar pond

[NASA-CASE-NFO-13581-2] c44 N77-28584

COST REDUCTION

Low cost solar energy collection system

[NASA-CASE-NFO-13579-1] c44 N75-28519

COUCHES

Shock absorbing couch for body support under high acceleration or deceleration forces

[NASA-CASE-XMS-01240] c05 N70-35152

Low onset rate energy absorber in form of strut assembly for crew couch of Apollo command module

[NASA-CASE-MSC-12279-1] c15 N70-35679

SUBJECT INDEX

CROSSLINKING

Shock absorbing articulated multiple couch assembly
[NASA-CASE-MSC-11253] c05 N71-12383

Collapsible couch system for manned space vehicles
[NASA-CASE-MSC-13140] c05 N72-11085

COULOMETERS

Alkaline-type coulometer cell for primary charge control in secondary battery recharge circuits
[NASA-CASE-XGS-05434] c03 N71-20491

Development and characteristics of battery charging circuits with coulometer for control of available current
[NASA-CASE-GSC-10487-1] c03 N71-24719

COUNTERS

Circuit for measuring wide range of pulse rates by utilizing high capacity counter
[NASA-CASE-XNP-06234] c10 N71-27137

Electronic strain level counter on in-flight aircraft
[NASA-CASE-LAR-10756-1] c32 N73-26910

COUNTING CIRCUITS

Rocket-borne aspect sensor consisting of radiation sensor, apertured disk, commutator, and counting circuits
[NASA-CASE-XGS-08266] c14 N69-27432

Design of transistorized ring counter circuit with special steering and triggering circuits
[NASA-CASE-XGS-03095] c09 N69-27463

Counter-divider circuit for accuracy and reliability in binary circuits
[NASA-CASE-XMF-00421] c09 N70-34502

Reversible ring counter using cascaded single silicon controlled rectifier stages
[NASA-CASE-XGS-01473] c09 N71-10673

Capacitor sandwich structure containing metal sheets of known thickness for counting penetration rates of meteoroids
[NASA-CASE-XLE-01246] c14 N71-10797

Electronic counter circuit utilizing magnetic core and low power consumption
[NASA-CASE-XNP-08836] c09 N71-12515

Synchronous counter design incorporating cascaded binary stages driven by previous stages and inputs through NAND gates
[NASA-CASE-XGS-02440] c08 N71-19432

Digital cardiometer incorporating circuit for measuring heartbeat rate of subject over predetermined portion of one minute also converting rate to beats per minute
[NASA-CASE-XMS-02399] c05 N71-22896

Computer circuit performing both counting and shifting logic operations also capable of miniaturization and integration in basic circuits
[NASA-CASE-XNP-01753] c08 N71-22897

Noninterruptable digital counter circuit design with display device for pulse frequency modulation
[NASA-CASE-XNP-09759] c08 N71-24891

Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-2(B)] c33 N74-14941

Frequency measurement by coincidence detection with standard frequency
[NASA-CASE-MSC-14649-1] c33 N76-16331

COUPLED MODES

Dual mode solid state power switch
[NASA-CASE-MPS-22880-1] c33 N76-31410

COUPLING

Coupling device for linear shaped charge for space vehicle abort system
[NASA-CASE-XLA-00189] c33 N70-36846

Base support for expandable and contractible coupling between two members
[NASA-CASE-NFO-11059] c15 N72-17454

COUPLING CIRCUITS

Interrogator and current driver circuit for combination with transistor flip-flop circuit
[NASA-CASE-XGS-03058] c10 N71-19547

Antenna array at focal plane of reflector with coupling network for beam switching
[NASA-CASE-GSC-10220-1] c07 N71-27233

Phase modulator with tuned variable length electrical lines including coupling and varactor diode circuits
[NASA-CASE-MSC-13201-1] c07 N71-28429

High efficiency transformerless amplitude modulator coupled to RF power amplifier
[NASA-CASE-GSC-10668-1] c07 N71-28430

Automatic quadrature control and measuring system --- using optical coupling circuitry
[NASA-CASE-MPS-21660-1] c35 N74-21017

Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-3] c33 N75-19520

Rotating joint signal coupler
[NASA-CASE-LAR-11264-1] c33 N75-27261

COUPLINGS

Releasable coupling device designed to receive and retain matching ends of electrical connectors
[NASA-CASE-XMS-07846-1] c09 N69-21927

Stage separation using remote control release of joint with explosive insert
[NASA-CASE-XLA-02854] c15 N69-27490

Space vehicle stage coupling and quick release separation mechanism
[NASA-CASE-XLA-01441] c15 N70-41679

Standard coupling design for mass production
[NASA-CASE-XMS-02532] c15 N70-41808

Quick-release coupling for fueling rocket vehicles with cryogenic propellants
[NASA-CASE-XKS-01985] c15 N71-10782

Ratchet mechanism for high speed operation at reduced backlash
[NASA-CASE-MPS-12805] c15 N71-17805

Split nut and bolt separation device
[NASA-CASE-XNP-06914] c15 N71-21489

Quick disconnect duct coupling device for single-handed operation
[NASA-CASE-MPS-20395] c15 N71-24903

Coupling arrangement for isolating torque loads from axial, radial, and bending loads
[NASA-CASE-XLA-04897] c15 N72-22482

Refrigerated coaxial coupling --- for microwave equipment
[NASA-CASE-NFO-13504-1] c33 N75-30430

Opto-mechanical subsystem with temperature compensation through isothermal design
[NASA-CASE-GSC-12059-1] c35 N77-27366

COVERINGS

Apparatus for ejecting covers of instrument packages using differential pressure principle
[NASA-CASE-XMF-04132] c15 N69-27502

CRACKING (FRACTURING)

Method to prevent stress corrosion cracking in titanium alloys
[NASA-CASE-NFO-10271] c17 N71-16393

TV fatigue crack monitoring system
[NASA-CASE-LAR-11490-1] c35 N76-28530

CRASH LANDING

Aircraft-mounted crash-activated transmitter device
[NASA-CASE-MPS-16609-3] c03 N76-32140

CREEP RUPTURE STRENGTH

Nickel base alloy with resistance to oxidation at high temperatures and superior stress-rupture properties
[NASA-CASE-XLE-02082] c17 N71-16026

CRITICAL EXPERIMENTS

Apparatus and process for volumetrically dispensing reagent quantities of volatile chemicals for small batch reactions
[NASA-CASE-NFO-10070] c15 N71-27372

CROSS CORRELATION

Surface roughness measuring system
[NASA-CASE-NFO-13862-1] c32 N77-17325

CROSSED FIELDS

Crossed-field plasma accelerator for laboratory simulation of atmospheric reentry conditions
[NASA-CASE-XLA-00675] c25 N70-33267

Direct conversion of thermal energy into electrical energy using crossed electric and magnetic fields
[NASA-CASE-XLE-00212] c03 N70-34134

Crossed field MHD plasma generator-accelerator
[NASA-CASE-XLA-03374] c25 N71-15562

CROSSLINKING

New trifunctional alcohol derived from trimer acid and novel method of preparation
[NASA-CASE-NFO-10714] c06 N69-31244

Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LEW-12053-1] c27 N74-34579

Polymeric foams from cross-linkable poly-N-arylenebenzimidazoles
[NASA-CASE-ARC-11008-1] c27 N76-28421

CRUCIBLES

Evaporating crucible of tantalum-tungsten foil, nickel alumina bonding agent, and ceramic coating
[NASA-CASE-XLA-03105] c15 N69-27483

CRUDE OIL

Decontamination of petroleum products with honey
[NASA-CASE-XNP-03835] c06 N71-23499

CRYOGENIC EQUIPMENT

Gas balancing, cryogenic refrigeration apparatus with Joule-Thomson valve assembly
[NASA-CASE-NFO-10309] c15 N69-23190
Low thermal loss piping arrangement for moving cryogenic media through double chamber structure
[NASA-CASE-XNP-08882] c15 N69-39935
Method and apparatus for removing plastic insulation from wire using cryogenic equipment
[NASA-CASE-NFS-10340] c15 N71-17628
Dual solid cryogenics for spacecraft refrigeration insuring low temperature cooling for extended periods
[NASA-CASE-GSC-10188-1] c23 N71-24725
Reliability of automatic refilling valving device for cryogenic liquid systems
[NASA-CASE-NPO-11177] c15 N72-17453
Dual stage check valve for cryogenic supply systems used in space flight environmental control system
[NASA-CASE-MSC-13587-1] c15 N73-30459
Heat operated cryogenic electrical generator
[NASA-CASE-NPO-13303-1] c20 N75-24837
Insulation for piping
[NASA-CASE-MSC-19523-1] c31 N76-16245
Cryostat system for temperatures on the order of 2 deg K or less
[NASA-CASE-NPO-13459-1] c31 N77-10229
Multistation refrigeration system
[NASA-CASE-NPO-13839-1] c31 N77-15219
Device for tensioning test specimens within an hermetically sealed chamber
[NASA-CASE-NFS-23281-1] c35 N77-22450
System for and method of freezing biological tissue
[NASA-CASE-GSC-12173-1] c52 N77-27693

CRYOGENIC FLUID STORAGE

Apparatus for cryogenic liquid storage with heat transfer reduction and for liquid transfer at zero gravity conditions
[NASA-CASE-XLE-00345] c15 N70-38020
Cryogenic storage system for gases onboard spacecraft
[NASA-CASE-XMS-04390] c31 N70-41871
Carbon dioxide purge systems to prevent condensation in spaces between cryogenic fuel tanks and hypersonic vehicle skin
[NASA-CASE-XLA-01967] c31 N70-42015
Fabrication of filament wound propellant tank for cryogenic storage
[NASA-CASE-XLE-03803-2] c15 N71-17651
Prefabricated multilayered self-evacuating insulation panels using gas with low vapor pressure at cryogenic temperatures for application to storage of cryogens
[NASA-CASE-XLE-04222] c23 N71-22881
Multilayer insulation panels for cryogenic liquid containers
[NASA-CASE-NFS-14023] c33 N71-25351
Development of thermal insulation material for insulating liquid hydrogen tanks in spacecraft
[NASA-CASE-XNP-05046] c33 N71-28892
Heater-mixer for stored fluids
[NASA-CASE-ABC-10442-1] c35 N74-15093

CRYOGENIC FLUIDS

Cryogenic flux-gated magnetometer using superconductors
[NASA-CASE-XAC-02407] c14 N69-27423
Fuel tank pressure-relief device for venting cryogenic liquid vapors through tubes with porous plug
[NASA-CASE-XLE-00288] c15 N70-34247
Conical valve plug for use with reactive cryogenic fluids
[NASA-CASE-XLE-00715] c15 N70-34859
Two component valve assembly for cryogenic liquid transfer regulation
[NASA-CASE-XLE-00397] c15 N70-36492
Measuring density of single and two-phase cryogenic fluids in rocket fuel tanks
[NASA-CASE-XLE-00688] c14 N70-41330

Leakproof soft metal seal for use in very high vacuum systems operating at cryogenic temperatures
[NASA-CASE-XGS-02441] c15 N70-41629
High pressure liquid flow sight assembly for wide temperature range applications including cryogenic fluids
[NASA-CASE-XLE-02998] c14 N70-42074
Automatic thermal switch for improving efficiency of cooling gases below 40 K
[NASA-CASE-XNP-03796] c23 N71-15467
Describing apparatus for separating gas from cryogenic liquid under zero gravity and for venting gas from fuel tank
[NASA-CASE-XLE-00586] c15 N71-15968
Development of apparatus for measuring thermal conductivity
[NASA-CASE-XGS-01052] c14 N71-15992
Method and apparatus for producing fine particles in cryogenic liquid bath for gelled rocket propellants
[NASA-CASE-NPO-10250] c23 N71-16212
Superconducting alternator design with cryogenic fluid for cooling windings below critical temperature
[NASA-CASE-XLE-02823] c09 N71-23443
Flow angle sensor and remote readout system for use with cryogenic fluids
[NASA-CASE-XLE-04503] c14 N71-24864
Design and development of device to prevent geysering during convective circulation of cryogenic fluids
[NASA-CASE-RSC-10615] c15 N73-12486
Magnetocaloric pump --- for cryogenic fluids
[NASA-CASE-LEW-11672-1] c37 N74-27904
Cryogenic liquid sensor
[NASA-CASE-NPO-10619-1] c35 N77-21393
CRYOGENIC GYROSCOPES
Cryogenic gyroscope housing --- with annular disks for gas spin-up
[NASA-CASE-NFS-21136-1] c35 N74-18323
CRYOGENIC MAGNETS
Improved alternator with windings of superconducting materials acting as permanent magnet
[NASA-CASE-XLE-02824] c03 N69-39890
CRYOGENIC ROCKET PROPELLANTS
Quick-release coupling for fueling rocket vehicles with cryogenic propellants
[NASA-CASE-XKS-01985] c15 N71-10782
Hot-wire liquid level detector for cryogenic propellants
[NASA-CASE-XLE-00454] c23 N71-17802
Automatically reciprocating, high pressure pump for use in spacecraft cryogenic propellants
[NASA-CASE-XNP-04731] c15 N71-24042
CRYOGENIC STORAGE
Light weight plastic foam thermal insulation for cryogenic storage
[NASA-CASE-XLE-02647] c18 N71-23658
Development of foam insulation for filament wound cryogenic storage tank
[NASA-CASE-XLE-03803] c15 N71-23816
CRYOGENICS
High strength aluminum casting alloy for cryogenic applications in aerospace engineering
[NASA-CASE-XNP-02786] c17 N71-20743
Portable cryogenic cooling system design including turbine pump, cooling chamber, and atomizer
[NASA-CASE-NPO-10467] c23 N71-26654
CRYOLITE
Ultraviolet filter of thorium fluoride and cryolite on quartz base
[NASA-CASE-XNP-02340] c23 N69-24332
CRYOSTATS
Cryostat for flexure fatigue testing of composite materials
[NASA-CASE-XNP-02964] c14 N71-17659
Cryostat for use with horizontal fatigue testing machines at low temperatures
[NASA-CASE-XNP-10968] c14 N71-24234
Heater-mixer for stored fluids
[NASA-CASE-ABC-10442-1] c35 N74-15093
Cryostat system for temperatures on the order of 2 deg K or less
[NASA-CASE-NPO-13459-1] c31 N77-10229
CRYSTAL FILTERS
Infrared tunable dye laser with nonlinear

- wavelength mixing crystal in optical cavity
[NASA-CASE-ARC-10463-1] c09 N73-32111
- CRYSTAL GROWTH**
Device for producing high purity silicon carbide on carbon base by hydrogen reduction of silicon tetrachloride
[NASA-CASE-XLA-02057] c26 N70-40015
Electrodeposition method for producing crystalline material from dense gaseous medium
[NASA-CASE-NFO-10440] c15 N72-21466
Growth of gallium nitride crystals
[NASA-CASE-LAR-11302-1] c25 N75-13054
Vapor phase growth of groups 3-5 compounds by hydrogen chloride transport of the elements
[NASA-CASE-LAR-11144-1] c25 N75-26043
Process for fabricating SiC semiconductor devices
[NASA-CASE-LEW-12094-1] c76 N76-25049
Production of crystals from molten solutions
[NASA-CASE-NFO-13969-2] c76 N77-30984
Method of crystallization --- in gravity-free environments
[NASA-CASE-NFS-23001-1] c76 N77-32919
- CRYSTAL LATTICES**
An improved method and apparatus for use in examining the lattice of a semiconductor wafer by X-ray diffraction
[NASA-CASE-NFS-23315-1] c76 N76-32029
- CRYSTAL OSCILLATORS**
Describing crystal oscillator instrument for detecting condensable gas contaminants in vacuum apparatus
[NASA-CASE-NFO-10144] c14 N71-17701
Passive intrusion detection system
[NASA-CASE-NFO-13804-1] c35 N77-19390
- CRYSTAL RECTIFIERS**
Turn on current transient limiter for controlling peak current flow in high capacity load
[NASA-CASE-GSC-10413] c10 N71-26531
- CRYSTAL STRUCTURE**
Soft X-ray laser using crystal channels as distributed feedback cavities --- zeolites
[NASA-CASE-NFO-13532-1] c36 N75-15973
Method of growing composites of the type exhibiting the Soret effect --- improved structure of eutectic alloy crystals
[NASA-CASE-NFS-22926-1] c24 N77-27187
- CRYSTALLIZATION**
Production of crystals from molten solutions
[NASA-CASE-NFO-13969-2] c76 N77-30984
Method of crystallization --- in gravity-free environments
[NASA-CASE-NFS-23001-1] c76 N77-32919
- CRYSTALS**
Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
[NASA-CASE-NFS-20385] c09 N71-24904
- CULTURE TECHNIQUES**
Development of variable angle device for positioning test tubes to permit optimum drying of culture medium
[NASA-CASE-LAR-10307-1] c11 N72-25284
Automatic inoculating apparatus --- includes movable carriage, drive motor, and swabbing motor
[NASA-CASE-LAR-11074-1] c51 N75-13502
Automatic microbial transfer device
[NASA-CASE-LAR-11354-1] c35 N75-27330
- CURING**
Reaction cured glass and glass coatings
[NASA-CASE-ARC-11051-1] c27 N77-10201
- CURRENT CONVERTERS (AC TO DC)**
Method and apparatus for automatic load sharing among paralleled converters
[NASA-CASE-NFO-13832-1] c33 N76-26393
- CURRENT DENSITY**
Solid state switching circuit design to increase current capacity of low rated relay contacts
[NASA-CASE-INP-09228] c09 N69-27500
Technique and equipment for sputtering using apertured electrode and pulsed substrate bias
[NASA-CASE-LEW-10920-1] c17 N73-24569
- CURRENT DISTRIBUTION**
Distribution of currents to circuits using electrical adaptor
[NASA-CASE-XLA-01288] c09 N69-21470
Electron bombardment ion rocket engine with improved propellant introduction system
[NASA-CASE-XLE-02066] c28 N71-15661
- Reversible current directing circuitry for reversible motor control**
[NASA-CASE-XLA-09371] c10 N71-18724
- Electric circuit for reversing direction of current flow**
[NASA-CASE-INP-00952] c10 N71-23271
- Load insensitive electrical device --- power converters for supplying direct current at one voltage from a source at another voltage**
[NASA-CASE-XER-11046-2] c33 N74-22864
- Method and apparatus for automatic load sharing among paralleled converters**
[NASA-CASE-NFO-13832-1] c33 N76-26393
- Overload protection system for power inverter**
[NASA-CASE-NFO-13872-1] c33 N77-17359
- CURRENT REGULATORS**
Apparatus for ballasting high frequency transistors
[NASA-CASE-XGS-05003] c09 N69-24318
Automatic baseline stabilization for ionization detector used in gas chromatograph
[NASA-CASE-INP-03128] c10 N70-41991
Describing magnetic core current switching device for steering bipolar current pulses to memory units
[NASA-CASE-NFO-10201] c08 N71-18694
Circuit design for determining amount of photomultiplier tube light detection utilizing variable current source and dark current signals of opposite polarity
[NASA-CASE-XMS-03478] c14 N71-21040
Switching series regulator with gating control network
[NASA-CASE-XMS-09352] c09 N71-23316
Magnetic current regulator for saturable core transformer
[NASA-CASE-ERC-10075] c09 N71-24800
Automatic power supply circuit design for driving inductive loads and minimizing power consumption including solenoid example
[NASA-CASE-NFO-10716] c09 N71-24892
Turn on current transient limiter for controlling peak current flow in high capacity load
[NASA-CASE-GSC-10413] c10 N71-26531
Current regulating voltage divider design with load current shunting
[NASA-CASE-NFS-20935] c09 N71-34212
Circuit for monitoring power supply by ripple current indication
[NASA-CASE-KSC-10162] c09 N72-11225
Inrush current limiter
[NASA-CASE-GSC-11789-1] c33 N77-14333
Dual mode solid state power switch
[NASA-CASE-NFS-22880-2] c33 N77-31407
Circuit for automatic load sharing in parallel converter modules
[NASA-CASE-NFO-14056-1] c33 N77-32402
- CURVATURE**
Apparatus and method for spin forming tubular elbows with high strength, uniform thickness, and close tolerances
[NASA-CASE-INP-01083] c15 N71-22723
Two degree inverted flexure from single block of material
[NASA-CASE-ARC-10345-1] c15 N73-12488
- CURVE FITTING**
Simulating voltage-current characteristic curves of solar cell panel with different operational parameters
[NASA-CASE-XMS-01554] c10 N71-10578
- CURVED PANELS**
Fabrication of curved reflector segments for solar mirror
[NASA-CASE-XLE-08917] c15 N71-15597
Method and apparatus for bowing of instrument panels to improve radio frequency shielded enclosure
[NASA-CASE-INP-09422] c07 N71-19436
Space erectable rollup solar array of arcuate solar panels furled on tapered drum for spacecraft storage during launch
[NASA-CASE-NFO-10188] c03 N71-20273
Forming mold for polishing and machining curved solar magnesium reflector with reinforcing ribs
[NASA-CASE-XLE-08917-2] c15 N71-24836
- CUSHIONS**
An improved vehicular impact absorption system

CUTTERS

SUBJECT INDEX

[NASA-CASE-NPO-14014-1] c37 N77-31501
 A seat cushion to provide realistic acceleration
 cues for aircraft simulator pilots
 [NASA-CASE-LAR-12149-1] c54 N77-31787

CUTTERS

Description of device for aligning stacked
 sheets of paper for repetitive cutting
 [NASA-CASE-XMS-04178] c15 N71-22798
 Portable cutting machine for piping weld
 preparation
 [NASA-CASE-XKS-07953] c15 N71-26134
 Precision surface cutter for screen circuit
 negatives and other microcircuits
 [NASA-CASE-XLA-09843] c15 N72-27485
 Insert facing tool --- manually operated cutting
 tool for forming studs in honeycomb material
 [NASA-CASE-MFS-21485-1] c37 N74-25968
 Grinding arrangement for ball nose milling cutters
 [NASA-CASE-LAR-10450-1] c37 N74-27905
 Ophthalmic liquifaction pump
 [NASA-CASE-LBW-12051-1] c52 N75-33640

CUTTING

Ellipsograph for describing and cutting ellipses
 with minimal axial dimensions
 [NASA-CASE-XLA-03102] c14 N71-21079
 Precision alignment apparatus for cutting a
 workpiece
 [NASA-CASE-LAR-11658-1] c37 N77-14478

CYCLES

Pneumatic system for cyclic control of fluid
 flow in pneumatic device
 [NASA-CASE-XMS-04843] c03 N69-21469
 Multistage feedback shift register with states
 decomposable into cycles of equal length
 [NASA-CASE-NPO-11082] c08 N72-22167

CYCLIC ACCELERATORS

Cyclical bi-directional rotary actuator
 [NASA-CASE-GSC-11883-1] c37 N77-19458

CYCLIC HYDROCARBONS

Para-benzoguinone dioxide and concentrated
 mineral acid processed to yield intumescent or
 fire resistant, heat insulating materials
 [NASA-CASE-ARC-10304-1] c18 N73-26572

CYCLIC LOADS

Automatic controlled thermal fatigue testing
 apparatus
 [NASA-CASE-XLA-02059] c33 N71-24276
 Development of device for simulating cyclic
 thermal loading of flexible materials by
 application of mechanical stresses and
 deformations
 [NASA-CASE-LAR-10270-1] c32 N72-25877
 Material testing system with load sensor for
 applying and measuring cyclic tensile and
 compressive loads to test specimens
 [NASA-CASE-MFS-20673] c14 N73-20476

CYCLOTRON RADIATION

Apparatus for producing high purity I-123 from
 Xe-123 by bombardment tellurium target with
 cyclotron beam
 [NASA-CASE-LBW-10518-2] c24 N72-28714

CYLINDRICAL ANTENNAS

Variable beamwidth antenna --- with multiple
 beam, variable feed system
 [NASA-CASE-GSC-11862-1] c32 N76-18295

CYLINDRICAL BODIES

Apparatus for scanning the surface of a
 cylindrical body
 [NASA-CASE-NPO-11861-1] c36 N74-20009
 Adjustable securing base
 [NASA-CASE-MSC-19666-1] c37 N76-31529

D

DAMPING

Dynamic precession damping of spin-stabilized
 vehicles by using rate gyroscope and angular
 accelerometer
 [NASA-CASE-XLA-01989] c21 N70-34295
 Sloss damping method for liquid rocket
 propellant tanks
 [NASA-CASE-XMP-00658] c12 N70-38997
 Utilization of momentum devices for forming
 attitude control and damping system for
 spacecraft
 [NASA-CASE-XLA-02551] c21 N71-21708
 Three stage motion restraining mechanism for
 restraining and damping three dimensional
 vibrational movement of gimballed package

during launch of spacecraft
 [NASA-CASE-GSC-10306-1] c15 N71-24694
 Mutation damper for use on spinning body
 [NASA-CASE-GSC-11205-1] c15 N73-25513
 Development of electrical circuit for
 suppressing oscillations across inductor
 operating in resonant mode
 [NASA-CASE-ERC-10403-1] c10 N73-26228

DATA ACQUISITION

Conversion system for increasing resolution of
 analog to digital converters
 [NASA-CASE-XAC-00404] c08 N70-40125
 Development of telemetry system for position
 location and data acquisition
 [NASA-CASE-GSC-10083-1] c30 N71-16090
 Data acquisition system for converting displayed
 analog signal to digital values
 [NASA-CASE-NPO-10344] c10 N71-26544
 Data acquisition and processing system with
 buffer storage and timing device for magnetic
 tape recording of PCM data and timing
 information
 [NASA-CASE-NPO-12107] c08 N71-27255
 Simultaneous acquisition of tracking data from
 two stations
 [NASA-CASE-NPO-13292-1] c32 N75-15854
 Contour detector and data acquisition system for
 the left ventricular outline
 [NASA-CASE-ARC-10985-1] c52 N77-17701

DATA COLLECTION PLATFORMS

Remote platform power conserving system
 [NASA-CASE-GSC-11182-1] c15 N75-13007

DATA COMPRESSION

Minimum time delay unit for conventional time
 multiplexed data compression channels
 [NASA-CASE-XMP-08832] c08 N71-12506
 Data compression processor for monitoring analog
 signals by sampling procedure
 [NASA-CASE-NPO-10068] c08 N71-19288
 Wide range analog data compression system
 [NASA-CASE-XGS-02612] c08 N71-19435
 Apparatus with summing network for compression
 of analog data by decreasing slope threshold
 sampling
 [NASA-CASE-NPO-10769] c08 N72-11171
 Data reduction and transmission system for IV
 PCM data
 [NASA-CASE-NPO-11243] c07 N72-20154
 Gated compressor, distortionless signal limiter
 [NASA-CASE-NPO-11820-1] c32 N74-19788
 Space communication system for compressed data
 with a concatenated Reed-Solomon-Viterbi
 coding channel
 [NASA-CASE-NPO-13545-1] c32 N77-12240
 Sampling video compression system
 [NASA-CASE-ARC-10984-1] c32 N77-24328

DATA CONVERTERS

Logarithmic converter for compressing 19-digit
 binary input number to 8-digit output
 [NASA-CASE-XLA-00471] c08 N70-34778
 Mechanical coordinate converter for use with
 spacecraft tracking antennas
 [NASA-CASE-XMP-00614] c14 N70-36907
 Analog signal to discrete time converter
 [NASA-CASE-ERC-10048] c09 N72-25251
 Digital converter for scaling binary number to
 binary coded decimal number of higher multiple
 [NASA-CASE-KSC-10595] c08 N73-12176
 Image data rate converter having a drum with a
 fixed head and a rotatable head
 [NASA-CASE-NPO-11659-1] c35 N74-11283
 Electronic analog divider
 [NASA-CASE-LBW-11881-1] c33 N77-17354

DATA LINKS

Characteristics of two channel telemetry system
 with two data rate channels for high and low
 data rate communication
 [NASA-CASE-NPO-11572] c07 N73-16121
 Automatic accounting system for transfer of data
 from terminals to computer
 [NASA-CASE-NPO-11456] c08 N73-26176
 Multi-computer multiple data path hardware
 exchange system
 [NASA-CASE-NPO-13422-1] c60 N76-14818
 Apparatus for simulating optical transmission
 links
 [NASA-CASE-GSC-11877-1] c74 N76-18913

DATA MANAGEMENT

Selective data segment monitoring system ---

SUBJECT INDEX

DATA STORAGE

using shift registers
[NASA-CASE-ARC-10899-1] c60 N77-19760

DATA PROCESSING

Data processing and display system for terminal guidance of X-15 aircraft
[NASA-CASE-XFR-00756] c02 N71-13421

Encoders designed to generate comma free biorthogonal Reed-Muller type code comprising conversion of 64 6-bit words into 64 32-bit data for communication purposes
[NASA-CASE-NPO-10595] c10 N71-25917

Data acquisition and processing system with buffer storage and timing device for magnetic tape recording of PCM data and timing information
[NASA-CASE-NPO-12107] c08 N71-27255

Digital data handling circuits for pulse amplifiers
[NASA-CASE-INP-01068] c10 N71-28739

Synchronized digital communication system
[NASA-CASE-INP-03623] c09 N73-28084

Image data rate converter having a drum with a fixed head and a rotatable head
[NASA-CASE-NPO-11659-1] c35 N74-11283

An interactive color display for multispectral imagery using correlation clustering
[NASA-CASE-MSC-16253-1] c43 N77-31583

Charge-coupled device data processor for an airborne imaging radar system
[NASA-CASE-NPO-13587-1] c32 N77-32342

DATA PROCESSING EQUIPMENT

Data processor having multiple sections activated at different times by selective power coupling to sections
[NASA-CASE-XGS-04767] c08 N71-12494

Development of demodulation system for removing amplitude modulation from two quadrature displaced data bearing signals
[NASA-CASE-XAC-04030] c10 N71-19472

Development and characteristics of rate augmented digital to analog converter for computed time-dependent data
[NASA-CASE-XLA-07828] c08 N71-27057

Data processor with plural register stages for selectively interconnecting with each other to effect multiplicity of operations
[NASA-CASE-GSC-10186] c08 N71-33110

Development and characteristics of telemetry system using computer-accessed circuits and remotely controlled from ground station
[NASA-CASE-NPO-11358] c07 N72-25172

Development and characteristics of data decoder to process convolution encoded information
[NASA-CASE-NPO-11371] c08 N73-12177

Characteristics of digital data processor using pulse from clock source to derive binary singles to show state of various indicators in processor
[NASA-CASE-GSC-10975-1] c08 N73-13187

Automatic accounting system for transfer of data from terminals to computer
[NASA-CASE-NPO-11456] c08 N73-26176

Space communication system for compressed data with a concatenated Reed-Solomon-Viterbi coding channel
[NASA-CASE-NPO-13545-1] c32 N77-12240

DATA RECORDERS

Description of system for recording and reading out data related to distribution of occurrence of plurality of events
[NASA-CASE-INP-04067] c08 N71-22707

Design and characteristics of recording system for selective reprocessing and filtering of data to obtain optimum signal to noise ratios
[NASA-CASE-ERC-10112] c07 N72-21119

Recorder/processor apparatus --- for optical data processing
[NASA-CASE-GSC-11553-1] c35 N74-15831

DATA RECORDING

System for recording and reproducing PCM data from data stored on magnetic tape
[NASA-CASE-XGS-01021] c08 N71-21042

Description of system for recording and reading out data related to distribution of occurrence of plurality of events
[NASA-CASE-INP-04067] c08 N71-22707

Development of data storage system for storing digital data in high density format on magnetic tape
[NASA-CASE-INP-02778] c08 N71-22710

Transient video signal tape recorder with expanded playback
[NASA-CASE-ARC-10003-1] c09 N71-25866

Apparatus for on-film optical recording of camera lens aperture and focus setting
[NASA-CASE-MSC-12363-1] c14 N73-26431

Image data rate converter having a drum with a fixed head and a rotatable head
[NASA-CASE-NPO-11659-1] c35 N74-11283

Holography utilizing surface plasmon resonances
[NASA-CASE-MFS-22040-1] c35 N74-26946

DATA REDUCTION

System for storing histogram data in optimum number of elements
[NASA-CASE-INP-09785] c08 N69-21928

Respiration analyzing method and apparatus for determining subjects oxygen consumption in aerospace environments
[NASA-CASE-XPR-08403] c05 N71-11202

Minimum time delay unit for conventional time multiplexed data compression channels
[NASA-CASE-INP-08832] c08 N71-12506

Data compression processor for monitoring analog signals by sampling procedure
[NASA-CASE-NPO-10068] c08 N71-19288

Wide range analog data compression system
[NASA-CASE-XGS-02612] c08 N71-19435

Description of system for recording and reading out data related to distribution of occurrence of plurality of events
[NASA-CASE-INP-04067] c08 N71-22707

Apparatus with summing network for compression of analog data by decreasing slope threshold sampling
[NASA-CASE-NPO-10769] c08 N72-11171

Data reduction and transmission system for TV PCM data
[NASA-CASE-NPO-11243] c07 N72-20154

Data compression using decreasing slope threshold test and digital techniques
[NASA-CASE-NPO-11630] c08 N72-33172

DATA RETRIEVAL

Magnetic matrix memory system for nondestructive reading of information contained in matrix
[NASA-CASE-INP-05835] c08 N71-12504

Asynchronous, multiplexing, single line transmission and recovery data system --- for satellite use
[NASA-CASE-NPO-13321-1] c32 N75-26195

DATA SAMPLING

Monitoring circuit design for sampling circuit control and reduction of time-bandwidth in video communication systems
[NASA-CASE-INP-02791] c07 N71-23026

Sampling circuit for signal processing in multiplex transmission by Fourier analysis
[NASA-CASE-NPO-10388] c07 N71-24622

Video signal processing system for sampling video brightness levels
[NASA-CASE-NPO-10140] c07 N71-24742

Apparatus with summing network for compression of analog data by decreasing slope threshold sampling
[NASA-CASE-NPO-10769] c08 N72-11171

Sampling video compression system
[NASA-CASE-ARC-10984-1] c32 N77-24328

DATA SMOOTHING

Variable time constant, wide frequency range smoothing network for noise removal from pulse chains
[NASA-CASE-XGS-01983] c10 N70-41964

DATA STORAGE

Data handling based on source significance, storage availability, and data received from source
[NASA-CASE-INP-04162-1] c08 N70-34675

Magnetic matrix memory system for nondestructive reading of information contained in matrix
[NASA-CASE-INP-05835] c08 N71-12504

Tape guidance system for multichannel digital recording system
[NASA-CASE-INP-09453] c08 N71-19420

Event recorder with constant speed motor which rotates recording disk
[NASA-CASE-XLA-01832] c14 N71-21006

System for recording and reproducing PCM data from data stored on magnetic tape
[NASA-CASE-XGS-01021] c08 N71-21042

- Development of data storage system for storing digital data in high density format on magnetic tape
[NASA-CASE-XNP-02778] c08 N71-22710
- Multiple pattern holographic information storage and readout system
[NASA-CASE-ERC-10151] c16 N71-29131
- Momentum wheel design for spacecraft attitude control and magnetic drum and head system for data storage
[NASA-CASE-NPO-11481] c21 N73-13644
- Data storage, image tube type
[NASA-CASE-MSC-14053-1] c60 N74-12888
- DATA SYSTEMS**
- Data handling based on source significance, storage availability, and data received from source
[NASA-CASE-XNP-04162-1] c08 N70-34675
- Development and characteristics of rate augmented digital to analog converter for computed time-dependent data
[NASA-CASE-XLA-07828] c08 N71-27057
- Method and apparatus for decoding compatible convolutional codes
[NASA-CASE-MSC-14070-1] c32 N74-32598
- DATA TRANSMISSION**
- Telemetry data unit to form multibit words for use between demodulator and computer
[NASA-CASE-XNP-09225] c09 N69-24333
- Phase shift data transmission system with pseudo-noise synchronization code modulated with digital data into single channel for spacecraft communication
[NASA-CASE-XNP-00911] c08 N70-41961
- Minimum time delay unit for conventional time multiplexed data compression channels
[NASA-CASE-XNP-08832] c08 N71-12506
- Data compression processor for monitoring analog signals by sampling procedure
[NASA-CASE-NFO-10068] c08 N71-19288
- Wide range analog data compression system
[NASA-CASE-XGS-02612] c08 N71-19435
- Plural channel data transmission system with quadrature modulation and complementary demodulation
[NASA-CASE-XAC-06302] c08 N71-19763
- Monitoring circuit design for sampling circuit control and reduction of time-bandwidth in video communication systems
[NASA-CASE-XNP-02791] c07 N71-23026
- Frequency shift keying apparatus for use with pulse code modulation data transmission system
[NASA-CASE-XGS-01537] c07 N71-23405
- Binary data decoding device for use at receiving end of communication channel
[NASA-CASE-NFO-10118] c07 N71-24741
- Data reduction and transmission system for TV PCM data
[NASA-CASE-NPO-11243] c07 N72-20154
- Characteristics of two channel telemetry system with two data rate channels for high and low data rate communication
[NASA-CASE-NFO-11572] c07 N73-16121
- Telemetry and transmission system with programmed sampling and multiplexing
[NASA-CASE-GSC-11388-1] c07 N73-24187
- Automatic accounting system for transfer of data from terminals to computer
[NASA-CASE-NPO-11456] c08 N73-26176
- System for generating timing and control signals
[NASA-CASE-NPO-13125-1] c33 N75-19519
- Sampling video compression system
[NASA-CASE-ARC-10984-1] c32 N77-24328
- Pseudo noise code and data transmission method and apparatus
[NASA-CASE-GSC-12017-1] c32 N77-30308
- DEBRIS**
- Counter pumping debris excluder and separator
[NASA-CASE-LEW-11855-1] c37 N76-20487
- DECAY RATES**
- Solar sensor with coarse and fine sensing elements for matching pre-irradiated cells on degradation rates
[NASA-CASE-XLA-01584] c14 N71-23269
- DECELERATION**
- Assembly for opening flight capsule stabilizing and decelerating flaps with reference to capsule recovery
[NASA-CASE-XNP-00641] c31 N70-36410
- Device for use in descending spacecraft as altitude sensor for actuating deceleration retro-rockets
[NASA-CASE-XNS-03792] c14 N70-41812
- Development and characteristics of hot air balloon deceleration and recovery system
[NASA-CASE-XLA-06824-2] c02 N71-11037
- Zero gravity apparatus utilizing pneumatic decelerating means to create payload subjected to zero gravity conditions by dropping its height
[NASA-CASE-XNP-06515] c14 N71-23227
- DECIMALS**
- Digital converter for scaling binary number to binary coded decimal number of higher multiple
[NASA-CASE-KSC-10595] c08 N73-12176
- DECISION MAKING**
- Method and apparatus for decoding compatible convolutional codes
[NASA-CASE-MSC-14070-1] c32 N74-32598
- DECODERS**
- Serial digital decoder design with square circuit matrix and serial memory storage units
[NASA-CASE-NPO-10150] c08 N71-24650
- Binary to decimal decoder logic circuit design with feedback control and display device
[NASA-CASE-KKS-06167] c08 N71-24890
- Design and development of encoder/decoder system to generate binary code which is function of outputs of plurality of bistable elements
[NASA-CASE-NFO-10342] c10 N71-33407
- Compact bi-phase pulse coded modulation decoder
[NASA-CASE-KSC-10834-1] c33 N76-14371
- Low distortion receiver for bi-level baseband PCM waveforms
[NASA-CASE-MSC-14557-1] c32 N76-16249
- Three-phase full wave dc motor decoder
[NASA-CASE-GSC-11824-1] c33 N77-26386
- DECODING**
- Binary data decoding device for use at receiving end of communication channel
[NASA-CASE-NFO-10118] c07 N71-24741
- Development and characteristics of data decoder to process convolution encoded information
[NASA-CASE-NFO-11371] c08 N73-12177
- Method and apparatus for decoding compatible convolutional codes
[NASA-CASE-MSC-14070-1] c32 N74-32598
- Differential pulse code modulation
[NASA-CASE-MSC-12506-1] c32 N77-12239
- DECONTAMINATION**
- Decontamination of petroleum products with honey
[NASA-CASE-XNP-03835] c06 N71-23499
- Heat exchanger and decontamination system for multistage refrigeration unit
[NASA-CASE-NFO-10634] c23 N72-25619
- Plasma cleaning device
[NASA-CASE-MFS-22906-1] c75 N76-24001
- DEEP SPACE NETWORK**
- Low phase noise frequency divider for use with deep space network communication system
[NASA-CASE-NFO-11569] c10 N73-26229
- DEFECTS**
- Hybrid holographic non-destructive test system --- optical and acoustical methods capable of detecting flaws in materials
[NASA-CASE-MFS-23114-1] c35 N76-24529
- DEFLECTION**
- Bipropellant injector with pair of concave deflector plates
[NASA-CASE-XNP-09461] c28 N72-23809
- Horizontally mounted solar collector
[NASA-CASE-MFS-23349-1] c44 N77-30613
- DEFLECTORS**
- Deflector for preventing objects from entering nacelle inlets of jet aircraft
[NASA-CASE-XLE-00388] c28 N70-34788
- Aircraft wheel spray drag alleviator for dual tandem landing gear
[NASA-CASE-XLA-01583] c02 N70-36825
- Ion beam deflector system for electronic thrust vector control for ion propulsion yaw, pitch, and roll forces
[NASA-CASE-LEW-10689-1] c28 N71-26173
- Exhaust flow deflector --- for ducted gas flow
[NASA-CASE-LAR-11570-1] c34 N76-18364
- DEFOCUSING**
- Optical retrodirective modulator with focus spoiling reflector driven by modulation signal

SUBJECT INDEX

DETECTION

[NASA-CASE-GSC-10062] c14 N71-15605
DEFORMATION
 Deformation measuring apparatus with feedback control for arbitrarily shaped structures [NASA-CASE-LAR-10098] c32 N71-26681
 Development of device for simulating cyclic thermal loading of flexible materials by application of mechanical stresses and deformations [NASA-CASE-LAR-10270-1] c32 N72-25877
 Deformable bearing seat [NASA-CASE-LEW-12527-1] c37 N77-32500
DEGREES OF FREEDOM
 Attitude control training device for astronauts permitting friction-free movement with five degrees of freedom [NASA-CASE-XMS-02977] c11 N71-10746
 Tuned damped vibration absorber for mass vibrating in more than one degree of freedom for use with wind tunnel models [NASA-CASE-LAR-10083-1] c15 N71-27006
 Kinesthetic control simulator --- for pilot training [NASA-CASE-LAR-10276-1] c09 N75-15662
DEHUMIDIFICATION
 Condenser-separator for dehumidifying air utilizing sintered metal surface [NASA-CASE-XLA-08645] c15 N69-21465
DEHYDRATED FOOD
 Rice preparation process consisting of cooking, two freezing-thawing cycles, and then freeze drying [NASA-CASE-MSC-13540-1] c05 N72-33096
DELAY CIRCUITS
 Development of pulsed differential comparator circuit [NASA-CASE-XLE-03804] c10 N71-19471
 Pulse duration control device for driving slow response time loads in selected sequence including switching and delay circuits and magnetic storage [NASA-CASE-XGS-04224] c10 N71-26418
 Telemetry synchronizer [NASA-CASE-GSC-11868-1] c17 N76-22245
DELAY LINES
 Development and characteristics of solid state acoustic variable time delay line using direct current voltage and radio frequency pulses [NASA-CASE-ERC-10032] c10 N71-25900
DELTA MODULATION
 Multifunction audio digitizer --- producing direct delta and pulse code modulation [NASA-CASE-MSC-13655-1] c35 N74-17885
DELTA WINGS
 Delta winged, manned reentry vehicle capable of horizontal glide landing at low speeds [NASA-CASE-XLA-00241] c31 N70-37986
DEMAGNETIZATION
 Tumbling motion system for object demagnetization [NASA-CASE-XGS-02437] c15 N69-21472
DEMODULATION
 Plural channel data transmission system with quadrature modulation and complementary demodulation [NASA-CASE-XAC-06302] c08 N71-19763
 Restoration and improvement of demodulated facsimile video signals [NASA-CASE-GSC-10185-1] c07 N72-12081
DEMODULATORS
 Telemetry data unit to form multibit words for use between demodulator and computer [NASA-CASE-XNP-09225] c09 N69-24333
 Frequency shift keyed demodulator - circuit diagrams [NASA-CASE-XGS-02889] c07 N71-11282
 Demodulator for simultaneous demodulation of two modulating ac signal carriers close in frequency [NASA-CASE-XNP-01160] c07 N71-11298
 Development of demodulation system for removing amplitude modulation from two quadrature displaced data bearing signals [NASA-CASE-XAC-04030] c10 N71-19472
 Calibrator for measuring and modulating or demodulating laser outputs [NASA-CASE-XLA-03410] c16 N71-25914
 Threshold extension device for improving operating performance of frequency modulation demodulators by eliminating click-type noise impulses

[NASA-CASE-MSC-12165-1] c07 N71-33696
 Pull wave modulator-demodulator amplifier apparatus --- for generating rectified output signal [NASA-CASE-PRC-10072-1] c33 N74-14939
 Unbalanced quadriphase demodulator [NASA-CASE-MSC-14840-1] c32 N77-24331
 Digital demodulator-correlator --- for range-finding [NASA-CASE-NFO-13982-1] c32 N77-24341
DENSITOMETERS
 Capacitor for measuring density of compressible fluid in liquid, gas, or liquid and gas phases [NASA-CASE-XLE-00143] c14 N70-36618
 Measuring density of single and two-phase cryogenic fluids in rocket fuel tanks [NASA-CASE-XLE-00688] c14 N70-41330
 Ultrasonic bone densitometer [NASA-CASE-MFS-20994-1] c35 N75-12271
DENSITY DISTRIBUTION
 Increasing available power per unit area in ion rocket engine by increasing beam density [NASA-CASE-XLE-00519] c28 N70-41576
 Varying density composite structure [NASA-CASE-LAR-11181-1] c39 N75-31479
 Method and apparatus for compensating reflection losses in a path length modulated absorption-absorption trace gas detector --- for determining density of gas [NASA-CASE-ARC-10631-1] c74 N76-20958
DENSITY MEASUREMENT
 Capacitor for measuring density of compressible fluid in liquid, gas, or liquid and gas phases [NASA-CASE-XLE-00143] c14 N70-36618
 Measuring density of single and two-phase cryogenic fluids in rocket fuel tanks [NASA-CASE-XLE-00688] c14 N70-41330
 Determining particle density using known material Ruggiot curves [NASA-CASE-LAR-11059-1] c76 N75-12810
DENTISTRY
 Process for preparing calcium phosphate salts for tooth repair [NASA-CASE-ERC-10338] c04 N72-33072
DEPLOYMENT
 Extendable, self-deploying boom apparatus [NASA-CASE-GSC-10566-1] c15 N72-18477
 Deployable cantilever support for deploying solar cell arrays aboard spacecraft and reducing transient loading [NASA-CASE-NPO-10883] c31 N72-22874
DEPOSITION
 Means and methods of depositing thin films on substrates [NASA-CASE-XNP-00595] c15 N70-34967
 Dual wavelength system for monitoring film deposition [NASA-CASE-MFS-20675] c26 N73-26751
 Production of pure metals [NASA-CASE-LEW-10906-1] c25 N74-30502
DESALINIZATION
 Water purification process [NASA-CASE-ARC-10643-2] c51 N75-13506
DESCENT
 Emergency descent device [NASA-CASE-MFS-23074-1] c54 N77-21844
DESIGN ANALYSIS
 Airfoil shape for flight at subsonic speeds --- design analysis and aerodynamic characteristics of the GAW-1 airfoil [NASA-CASE-LAR-10585-1] c02 N76-22154
 Two dimensional wedge/translating shroud nozzle [NASA-CASE-LAR-11919-1] c07 N76-22202
 Snap-in compressible biomedical electrode [NASA-CASE-MSC-14623-1] c52 N77-28717
DETECTION
 Heated element sensor for fluid flow detection in thermal conductive conduit with adaptive means to determine flow rate and direction [NASA-CASE-MSC-12084-1] c12 N71-17569
 Fluid leakage detection system with automatic monitoring capability [NASA-CASE-LAR-10323-1] c12 N71-17573
 Metal detection system with electromagnetic transmitter with single coil and receiver with single coil [NASA-CASE-ARC-10265-1] c10 N72-28240
 System for detecting impact position of cosmic dust on detector surface

- [NASA-CASE-GSC-11291-1] c25 N72-33696
 Detection of bacteria in biological fluids and foods
 [NASA-CASE-GSC-11533-1] c14 N73-13435
 Short range laser obstacle detector --- for surface vehicles using laser diode array
 [NASA-CASE-NFO-11856-1] c36 N74-15145
 Vacuum leak detector
 [NASA-CASE-LAR-11237-1] c35 N75-19612
 Detection of microbial infection in blood and antibiotic determinations
 [NASA-CASE-GSC-12045-1] c52 N77-18733
- DETECTORS**
 Pressurized cell micrometeoroid detector
 [NASA-CASE-XLA-00936] c14 N71-14996
 Development of large area micrometeoroid impact detector panels
 [NASA-CASE-XIF-05906] c31 N71-16221
 Development of pulse-activated pclarographic hydrogen detector
 [NASA-CASE-XNP-06531] c14 N71-17575
 Electro-optical detector for determining position of light source
 [NASA-CASE-XNP-01059] c23 N71-21821
 Method for locating leaks in hermetically sealed containers
 [NASA-CASE-ERC-10045] c15 N71-24910
 Precipitation detector and mechanism for stopping and restarting machinery at initiation and cessation of rain
 [NASA-CASE-XLA-02619] c10 N71-26334
 Hydrogen fire blink detector for high altitude rocket or ground installation
 [NASA-CASE-NFS-15063] c14 N72-25412
 Device for detection of combustion light preceding gaseous explosions
 [NASA-CASE-LAR-10739-1] c14 N73-16484
 Optical imaging system for increasing light absorption efficiency of imaging detector
 [NASA-CASE-ARC-10194-1] c23 N73-20741
 Cold cathode discharge tube with pressurized gas cell for meteoroid detection in space
 [NASA-CASE-LAR-10483-1] c14 N73-32327
 Deployable pressurized cell structure for a micrometeoroid detector
 [NASA-CASE-LAR-10295-1] c35 N74-21062
 Modulated hydrogen ion flame detector
 [NASA-CASE-ARC-10322-1] c35 N76-18403
- DETERGENTS**
 Anti-fog composition --- for prevention of fogging on surfaces such as space helmet visors and windshields
 [NASA-CASE-MSC-13530-2] c23 N75-14834
- DETONATION**
 Optically detonated explosive device
 [NASA-CASE-NFO-11743-1] c28 N74-27425
- DETONATION WAVES**
 Detonation reaction engine comprising outer housing enclosing pair of inner walls for continuous flow
 [NASA-CASE-XMP-06926] c28 N71-22983
- DEUTERIUM**
 Gas chromatographic method for analyzing hydrogen deuterium mixtures
 [NASA-CASE-NFO-11322] c06 N72-25146
 Deuterium pass through target --- neutron emitting target
 [NASA-CASE-LEW-11866-1] c72 N76-15860
- DIAGNOSIS**
 Apparatus for producing high purity I-123 --- for thyroid measurement
 [NASA-CASE-LEW-10518-3] c31 N74-10476
- DIAPHRAGMS**
 Phototransistor with base collector junction diode for integration into photo sensor arrays
 [NASA-CASE-NFS-20407] c09 N73-19235
- DIAMINES**
 Preparation of elastomeric diamine silazane polymers
 [NASA-CASE-XNP-04133] c06 N71-20717
 Synthesis of aromatic diamines and dialdehyde polymers using Schiff base
 [NASA-CASE-XMP-03074] c06 N71-24740
 Synthesis of siloxane containing epoxide and diamine polymers
 [NASA-CASE-NFS-13994-2] c06 N72-25148
 Stable polyimide synthesis from mixtures of monomeric diamines and polycarboxylic acid esters
- [NASA-CASE-LEW-11325-1] c06 N73-27980
- DIAMONDS**
 Exponential horn, copper plate, magnetic hammer, and anvil in apparatus for making diamonds
 [NASA-CASE-NFS-20698] c15 N72-20446
 Simplified technique and device for producing industrial grade synthetic diamonds
 [NASA-CASE-NFS-20698-2] c15 N73-19457
- DIAPHRAGMS (MECHANICS)**
 Expulsion and measuring device for determining quantity of liquid in tank under conditions of weightlessness
 [NASA-CASE-XMS-01546] c14 N70-40233
 Reinforcing beam system for highly flexible diaphragms in valves or pressure switches
 [NASA-CASE-XNP-01962] c32 N70-41370
 Flexible rocket motor nozzle closure device to aid ignition and protect rocket chamber from foreign objects
 [NASA-CASE-XLA-02651] c28 N70-41967
 Knife structure for controlling rupture of shock tube diaphragms
 [NASA-CASE-XAC-00731] c11 N71-15960
 Magnetically opened diaphragm design with camera shutter and expansion tube applications
 [NASA-CASE-XLA-03660] c15 N71-21060
 Design and development of inertia diaphragm pressure transducer
 [NASA-CASE-XAC-02981] c14 N71-21072
 Punch and die device for forming convolution series in thin gage metal hemispheres
 [NASA-CASE-XNP-05297] c15 N71-23811
 Rubber composition for expulsion bladders and diaphragms for use with hydrazine
 [NASA-CASE-NFO-11433] c18 N71-31140
 Development of differential pressure control system using motion of mechanical diaphragms to operate electric switch
 [NASA-CASE-NFS-14216] c14 N73-13418
 Spacesuit mobility joints
 [NASA-CASE-ARC-11058-1] c54 N77-15641
- DIATOMIC GASES**
 Diatomic infrared gasdynamic laser --- for producing different wavelengths
 [NASA-CASE-ARC-10370-1] c36 N75-31426
- DICHROISM**
 Dichroic plate --- as bandpass filters
 [NASA-CASE-NPO-13506-1] c35 N76-15435
- DIELECTRIC PROPERTIES**
 Capacitive tank gaging device for monitoring one constituent of two phase fluid by sensing dielectric constant
 [NASA-CASE-NFS-21629] c14 N72-22442
 Fine particulate capture device
 [NASA-CASE-LEW-11583-1] c37 N74-13199
- DIELECTRICS**
 Fabricating solar cells with dielectric layers to improve glass fusion
 [NASA-CASE-XGS-04531] c03 N69-24267
 Temperature sensitive capacitor device for detecting very low intensity infrared radiation
 [NASA-CASE-XNP-09750] c14 N69-39937
 Electrical power system for space flight vehicles operating over extended periods
 [NASA-CASE-XNP-00517] c03 N70-34157
 Nose cone mounted heat resistant antenna comprising plurality of adjacent layers of silica not introducing paths of high thermal conductivity through ablative shield
 [NASA-CASE-XMS-04312] c07 N71-22984
 Broadband microwave waveguide window to compensate dielectric material filling
 [NASA-CASE-XNP-08880] c09 N71-24808
 Laser machining device with dielectric functioning as beam waveguide for mechanical and medical applications
 [NASA-CASE-XQN-10541-2] c15 N71-27135
 Quasi-optical microwave circuit with dielectric body for use with oversize waveguides
 [NASA-CASE-ERC-10011] c07 N71-29065
 Semiconductor device manufacture using refractory dielectrics as diffusant masks and interconnection insulating materials
 [NASA-CASE-XER-08476-1] c26 N72-17820
 Material compositions and processes for developing dielectric thick films used in microcircuit capacitors
 [NASA-CASE-LAR-10294-1] c26 N72-28762

- Low loss dichroic plate
[NASA-CASE-WFO-13171-1] c32 N74-11000
- Electrostatic measurement system --- for
contact-electrifying a dielectric
[NASA-CASE-MFS-22129-1] c33 N75-18477
- Method and apparatus for measurement of trap
density and energy distribution in dielectric
films
[NASA-CASE-NPO-13443-1] c76 N76-20994
- Charge injection method and apparatus of
producing large area electrets
[NASA-CASE-MFS-23186-1] c33 N76-23483
- DIES**
Punch and die device for forming convolution
series in thin gage metal hemispheres
[NASA-CASE-INP-05297] c15 N71-23811
- Development and characteristics of
frusto-conical die nib for extrusion of
refractory metals
[NASA-CASE-XLE-06773] c15 N71-23817
- DIESEL ENGINES**
Hydrogen-fueled engine
[NASA-CASE-NPO-13763-1] c37 N77-11398
- DIETS**
Reduction of blood serum cholesterol
[NASA-CASE-NPO-12119-1] c52 N75-15270
- DIFFERENTIAL AMPLIFIERS**
Temperature compensated solid state differential
amplifier with application in
biointstrumentation circuits
[NASA-CASE-IAC-00435] c09 N70-35440
- Stepping motor control apparatus exciting
windings in proper time sequence to cause
motor to rotate in either direction
[NASA-CASE-GSC-10366-1] c10 N71-18772
- DIFFERENTIAL INTERFEROMETRY**
Device for determining acceleration of gravity
by interferometric measurement of travel of
falling body
[NASA-CASE-INP-05844] c14 N71-17587
- DIFFERENTIAL PRESSURE**
Relief valve to permit slow and fast bleeding
rates at difference pressure levels
[NASA-CASE-XMS-05894-1] c15 N69-21924
- Apparatus for ejecting covers of instrument
packages using differential pressure principle
[NASA-CASE-INP-04132] c15 N69-27502
- Differential optoacoustic absorption detector
[NASA-CASE-NPO-13759-1] c35 N77-11363
- DIFFERENTIATORS**
Window comparator
[NASA-CASE-FEC-10090-1] c33 N77-11296
- DIFFRACTION**
Highly stable optical mirror assembly optimizing
image quality of light diffraction patterns
[NASA-CASE-ERC-10001] c23 N71-24868
- DIFFRACTION PATTERNS**
Digital sensor for counting fringes produced by
interferometers with improved sensitivity and
one photomultiplier tube to eliminate
alignment problem
[NASA-CASE-LAR-10204] c14 N71-27215
- DIFFRACTOMETERS**
Dual purpose optical instrument capable of
simultaneously acting as spectrometer and
diffractometer
[NASA-CASE-INP-05231] c14 N73-28491
- DIFFUSERS**
Transmitting and reflecting diffuser
[NASA-CASE-LAR-10385-3] c23 N73-32538
- Application of semiconductor diffusants to solar
cells by screen printing
[NASA-CASE-LEW-12775-1] c44 N77-24589
- DIFFUSION**
Selective gold diffusion on monolithic silicon
chips for switching and nonswitching amplifier
devices and circuits and linear and digital
logic circuits
[NASA-CASE-ERC-10072] c09 N70-11148
- Metallic film diffusion for boundary lubrication
in aerospace engineering
[NASA-CASE-XLE-10337] c15 N71-24046
- Transmitting and reflecting diffuser --- for
ultraviolet light
[NASA-CASE-LAR-10385-2] c70 N74-13436
- DIFFUSION PUMPS**
Oil trap for preventing diffusion pump
backstreaming into evacuated system
[NASA-CASE-GSC-10518-1] c15 N72-22489
- Programmable physiological infusion
[NASA-CASE-ABC-10447-1] c52 N74-22771
- DIFFUSION WELDING**
Method for diffusion welding dissimilar metals
in vacuum chamber
[NASA-CASE-GSC-10303] c15 N72-22487
- Reinforced FEP Teflon composite material
diffusion bonded to metal substrate
[NASA-CASE-MFS-20482] c15 N72-22492
- Two-step diffusion welding process of
unrecrystallized alloys
[NASA-CASE-LEW-11388-1] c15 N73-32358
- Method of fluxless brazing and diffusion bonding
of aluminum containing components
[NASA-CASE-MSC-14435-1] c37 N76-18455
- A complementary DMOS-VMOS integrated circuit
structure
[NASA-CASE-GSC-12190-1] c33 N77-29403
- DIGITAL COMMAND SYSTEMS**
Digitally controlled frequency synthesizer for
pulse frequency modulation telemetry systems
[NASA-CASE-XGS-02317] c09 N71-23525
- System for maintaining motor at predetermined
speed using digital pulses
[NASA-CASE-XMP-06892] c09 N71-24805
- Digital filter for reducing jitter in digital
control systems
[NASA-CASE-NPO-11088] c08 N71-29034
- DIGITAL COMPUTERS**
Device for removing plastic dust cover from
digital computer disk packs for inspection and
cleaning
[NASA-CASE-LAR-10590-1] c15 N70-26819
- Binary number sorter for arranging numbers in
order of magnitude
[NASA-CASE-WFO-10112] c08 N71-12502
- Binary sequence detector with few memory
elements and minimized logic circuit complexity
[NASA-CASE-INP-05415] c09 N71-12505
- Digital computer system for automatic prelaunch
checkout of spacecraft
[NASA-CASE-XKS-08012-2] c31 N71-15566
- Description of error correcting methods for use
with digital data computers and apparatus for
encoding and decoding digital data
[NASA-CASE-INP-02748] c08 N71-22749
- Serial digital decoder design with square
circuit matrix and serial memory storage units
[NASA-CASE-WFO-10150] c08 N71-24650
- Digital magnetic core memory with sensing
amplifier circuits
[NASA-CASE-INP-01012] c08 N71-28925
- Redundant memory for enhanced reliability of
digital data processing system
[NASA-CASE-GSC-10564] c10 N71-29135
- Digital converter for scaling binary number to
binary coded decimal number of higher multiple
[NASA-CASE-KSC-10595] c08 N73-12176
- Fault tolerant clock apparatus utilizing a
controlled minority of clock elements
[NASA-CASE-MSC-12531-1] c35 N75-30504
- Two-dimensional radiant energy array computers
and computing devices
[NASA-CASE-GSC-11839-2] c60 N76-18803
- Two-dimensional radiant energy array computers
and computing devices
[NASA-CASE-GSC-11839-1] c60 N77-14751
- DIGITAL DATA**
Phase shift data transmission system with
pseudo-noise synchronization code modulated
with digital data into single channel for
spacecraft communication
[NASA-CASE-INP-00911] c08 N70-41961
- Tape guidance system for multichannel digital
recording system
[NASA-CASE-INP-09453] c08 N71-19420
- Digital telemetry system apparatus to reduce
tape recorder wow and flutter noise during
playback
[NASA-CASE-XGS-01812] c07 N71-23001
- Digital data handling circuits for pulse
amplifiers
[NASA-CASE-INP-01068] c10 N71-28739
- Bit synchronization system using digital data
transition tracking phased locked loop
[NASA-CASE-NPO-10844] c07 N72-20140
- Control and information system for digital
telemetry data using analog converter to
digitize sensed parameter values

- [NASA-CASE-NFO-11016] c08 N72-31226
Development and characteristics for automatically displaying digits in any desired order using optical techniques
[NASA-CASE-XKS-00348] c09 N73-14215
Digital plus analog output encoder
[NASA-CASE-GSC-12115-1] c62 N76-31946
Digital data reformatter/deserializer
[NASA-CASE-NFO-13676-1] c60 N77-24781
- DIGITAL FILTERS**
Design and development of signal detection and tracking apparatus
[NASA-CASE-XGS-03502] c10 N71-20852
Digital filter for reducing jitter in digital control systems
[NASA-CASE-NFO-11088] c08 N71-29034
Nonrecursive counting digital filter containing shift register
[NASA-CASE-NFO-11821-1] c08 N73-26175
Filtering device --- removing electromagnetic noise from voice communication signals
[NASA-CASE-NFS-22729-1] c32 N76-21366
- DIGITAL SPACECRAFT TELEVISION**
TV camera output signal control system for digital spacecraft communication
[NASA-CASE-XNP-01472] c14 N70-41807
- DIGITAL SYSTEMS**
Light sensitive digital aspect sensor for attitude control of earth satellites or space probes
[NASA-CASE-XGS-00359] c14 N70-34158
Circuit diagram and operation of full binary adder
[NASA-CASE-XGS-00689] c08 N70-34787
Digital telemetry system apparatus to reduce tape recorder wow and flutter noise during playback
[NASA-CASE-XGS-01812] c07 N71-23001
Reliable magnetic core circuit apparatus with application in selection matrices for digital memories
[NASA-CASE-XNP-01318] c10 N71-23033
Noninterruptable digital counter circuit design with display device for pulse frequency modulation
[NASA-CASE-XNP-09759] c08 N71-24891
Digital memory system with multiple switch cores for driving each word location
[NASA-CASE-XNP-01466] c10 N71-26434
Digital quasi-exponential function generator
[NASA-CASE-NFO-11130] c08 N72-20176
Digital function generator for generating any arbitrary single valued function
[NASA-CASE-NFO-11104] c08 N72-22165
Digital video system for displaying image and alphanumeric data on cathode ray tube
[NASA-CASE-NFO-11342] c09 N72-25248
Data compression using decreasing slope threshold test and digital techniques
[NASA-CASE-NFO-11630] c08 N72-33172
Characteristics of digital data processor using pulse from clock source to derive binary singles to show state of various indicators in processor
[NASA-CASE-GSC-10975-1] c08 N73-13187
Low phase noise frequency divider for use with deep space network communication system
[NASA-CASE-NFO-11569] c10 N73-26229
Synchronized digital communication system
[NASA-CASE-XNP-03623] c09 N73-28084
Digital second-order phase-locked loop
[NASA-CASE-NFO-11905-1] c33 N74-12887
Digital controller for a Baum folding machine --- providing automatic counting and machine shutoff
[NASA-CASE-LAR-10688-1] c37 N74-21056
Digital transmitter for data bus communications system
[NASA-CASE-MSC-14558-1] c32 N75-21486
Automatic character skew and spacing checking network --- of digital tape drive systems
[NASA-CASE-GSC-11925-1] c33 N76-18353
Anti-multipath digital signal detector
[NASA-CASE-LAR-11827-1] c32 N77-10392
Bit error rate measurement above and below bit rate tracking threshold
[NASA-CASE-MSC-12743-1] c32 N77-19290
Multiple rate digital command detection system with range clean-up capability
[NASA-CASE-NFO-13753-1] c32 N77-20289
- Digital automatic gain amplifier
[NASA-CASE-KSC-11008-1] c33 N77-21321
Digital demodulator-correlator --- for range-finding
[NASA-CASE-NFO-13982-1] c32 N77-24341
Open loop digital frequency multiplier
[NASA-CASE-MSC-12709-1] c33 N77-24375
- DIGITAL TECHNIQUES**
Describing frequency discriminator using digital logic circuits and supplying single binary output signal
[NASA-CASE-MFS-14322] c08 N71-18692
Constructing Exclusive-Or digital logic circuit in single module
[NASA-CASE-XLA-07732] c08 N71-18751
Horizon sensor design with digital sampling of spaced radiation-compensated thermopile infrared detectors
[NASA-CASE-XNP-06957] c14 N71-21088
Digital cardiometer incorporating circuit for measuring heartbeat rate of subject over predetermined portion of one minute also converting rate to beats per minute
[NASA-CASE-XMS-02399] c05 N71-22896
Digital synchronizer for extracting binary data in receiver of PSK/PCM communication system
[NASA-CASE-NFO-10851] c07 N71-24613
Digital sensor for counting fringes produced by interferometers with improved sensitivity and one photomultiplier tube to eliminate alignment problem
[NASA-CASE-LAR-10204] c14 N71-27215
Development and characteristics for automatically displaying digits in any desired order using optical techniques
[NASA-CASE-XKS-00348] c09 N73-14215
Apparatus and digital technique for coding rate data
[NASA-CASE-LAR-10128-1] c08 N73-20217
Digital communication system
[NASA-CASE-MSC-13912-1] c32 N74-30524
Digital phase-locked loop
[NASA-CASE-GSC-11623-1] c33 N75-25040
- DIGITAL TO ANALOG CONVERTERS**
Development and characteristics of rate augmented digital to analog converter for computed time-dependent data
[NASA-CASE-XLA-07828] c08 N71-27057
Digital to analog converter with parallel input/output memory device
[NASA-CASE-KSC-10397] c08 N72-25206
Digital to analog converter for sampled signal reconstruction
[NASA-CASE-MSC-12458-1] c08 N73-32081
- DIGITAL TRANSDUCERS**
Digital to analog converter for sampled signal reconstruction
[NASA-CASE-MSC-12458-1] c08 N73-32081
Angle detector
[NASA-CASE-ARC-11036-1] c35 N77-11364
- DIISOCYANATES**
Chemical and physical properties of synthetic polyurethane polymer prepared by reacting hydroxy carbonate with organic diisocyanate
[NASA-CASE-MFS-10512] c06 N73-30099
Preparation of stable polyurethane polymer by reacting polymer with diisocyanate
[NASA-CASE-MFS-10506] c06 N73-30100
Preparation of polyurethane polymer by reacting hydroxy polyformal with organic diisocyanate
[NASA-CASE-MFS-10509] c06 N73-30103
- DIMENSIONS**
Projection system for display of parallax and perspective
[NASA-CASE-MFS-23194-1] c74 N76-13909
- DIODES**
Single electrical circuit component combining diode, fuse, and blown indicator with elongated tube of heat resistant transparent material
[NASA-CASE-XKS-03381] c09 N71-22796
Maintaining current flow through solar cells with open connection using shunting diode
[NASA-CASE-XLE-04535] c03 N71-23354
Gunn effect microwave diodes with RF shielding
[NASA-CASE-ERC-10119] c26 N72-21701
Transistorized switching logic circuits with tunnel diodes
[NASA-CASE-GSC-10878-1] c10 N72-22236

- Development of method and apparatus for detecting surface ions on silicon diodes and transistors
[NASA-CASE-ERC-10325] c15 N72-25457
- Development of temperature compensated light source with components and circuitry for maintaining luminous intensity independent of temperature variations
[NASA-CASE-ARC-10467-1] c09 N73-14214
- Silicon carbide backward diode with coated lead attachment
[NASA-CASE-ERC-10224-2] c09 N73-27150
- Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-2(B)] c33 N74-14941
- High isolation RF signal selection switches
[NASA-CASE-NPO-13081-1] c33 N74-22814
- Logarithmic circuit with wide dynamic range
[NASA-CASE-GSC-12145-1] c33 N77-19319
- A regulated high efficiency, lightweight capacitor-diode multiplier DC to DC converter
[NASA-CASE-LEW-12791-1] c33 N77-24385
- DIPLOLE ANTENNAS**
- Circularly polarized antenna with linearly polarized pair of elements
[NASA-CASE-ERC-10214] c09 N72-31235
- DIRECT CURRENT**
- Regulated dc to dc converter
[NASA-CASE-XGS-03429] c03 N69-21330
- Automatic control of voltage supply to direct current motor
[NASA-CASE-XMS-04215-1] c09 N69-39987
- Thermionic diode switch for use in high temperature region to chop current from dc source
[NASA-CASE-NPO-10404] c03 N71-12255
- Transistorized dc-coupled multivibrator with noninverted output signal
[NASA-CASE-XNP-09450] c10 N71-18723
- Stepping motor control apparatus exciting windings in proper time sequence to cause motor to rotate in either direction
[NASA-CASE-GSC-10366-1] c10 N71-18772
- Frequency control network for current feedback oscillators converting dc voltage to ac or higher dc voltages
[NASA-CASE-GSC-10041-1] c10 N71-19418
- Direct current powered self repeating plasma accelerator with interconnected annular and linear discharge channels
[NASA-CASE-XLA-03103] c25 N71-21693
- Conversion of positive dc voltage to positive dc voltage of lower amplitude
[NASA-CASE-XMP-14301] c09 N71-23188
- Converting output of positive dc voltage source to negative dc voltage across load with common reference point
[NASA-CASE-XMP-08217] c03 N71-23239
- Blood pressure measuring system for separately recording dc and ac pressure signals of Korotkoff sounds
[NASA-CASE-XMS-06061] c05 N71-23317
- Radio frequency coaxial filter to provide dc isolation and low frequency signal rejection in audio range
[NASA-CASE-XGS-01418] c09 N71-23573
- Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
[NASA-CASE-NFS-20385] c09 N71-24904
- Inverters for changing direct current to alternating current
[NASA-CASE-XGS-06226] c10 N71-25950
- Circuits for controlling reversible dc motor
[NASA-CASE-XNP-07477] c09 N71-26092
- Feedback control for direct current motor to achieve constant speed under varying loads
[NASA-CASE-NFS-14610] c09 N71-28886
- High dc switch for causing abrupt, cyclic, decreases of current to operate under zero or varying gravity conditions
[NASA-CASE-LEW-10155-1] c09 N71-29035
- Power converters for supplying direct current at one voltage from source at another voltage
[NASA-CASE-XER-11046] c09 N72-22203
- DC to ac to dc converter with transistor driven synchronous rectifiers
[NASA-CASE-GSC-11126-1] c09 N72-25253
- Direct current motor including stationary field windings and stationary armature winding
[NASA-CASE-XGS-07805] c15 N72-33476
- Powerplexer for distribution of dc power levels to loads which require different voltages
[NASA-CASE-MSC-12396-1] c03 N73-31988
- Bio-isolated dc operational amplifier --- for bioelectric measurements
[NASA-CASE-ARC-10596-1] c33 N74-21851
- Load insensitive electrical device --- power converters for supplying direct current at one voltage from a source at another voltage
[NASA-CASE-XER-11046-2] c33 N74-22864
- Differential pulse code modulation
[NASA-CASE-MSC-12506-1] c32 N77-12239
- Method of electrically pre-stressing insulation to provide directional increase in dc potential breakdown
[NASA-CASE-LEW-12273-1] c33 N77-17357
- Direct current transformer
[NASA-CASE-NFS-23659-1] c33 N77-20341
- Three phase full wave dc motor decoder
[NASA-CASE-GSC-11824-1] c33 N77-26386
- DIRECT POWER GENERATORS**
- Direct conversion of thermal energy into electrical energy using crossed electric and magnetic fields
[NASA-CASE-XLE-00212] c03 N70-34134
- Thermal pump-compressor for converting solar energy
[NASA-CASE-XLA-00377] c33 N71-17610
- Converting output of positive dc voltage source to negative dc voltage across load with common reference point
[NASA-CASE-XMP-08217] c03 N71-23239
- Unsaturating magnetic core transformer design with warning signal for electrical power processing equipment
[NASA-CASE-ERC-10125] c09 N71-24893
- Load insensitive electrical device --- power converters for supplying direct current at one voltage from a source at another voltage
[NASA-CASE-XER-11046-2] c33 N74-22864
- Cesium thermionic converters having lanthanum hexaboride electrodes
[NASA-CASE-LEW-12038-2] c44 N77-32595
- DIRECTIONAL ANTENNAS**
- Mechanical coordinate converter for use with spacecraft tracking antennas
[NASA-CASE-XNP-00614] c14 N70-36907
- Weatherproof helix antenna
[NASA-CASE-XKS-08485] c07 N71-19493
- Tracking antenna system with array for synchronous satellite or ground based radar
[NASA-CASE-GSC-10553-1] c07 N71-19854
- Drive system for parabolic tracking antenna with reversible motion and minimal backlash
[NASA-CASE-NPO-10173] c15 N71-24696
- Variable beamwidth antenna --- with multiple beam, variable feed system
[NASA-CASE-GSC-11862-1] c32 N76-18295
- DIRECTIONAL CONTROL**
- Gimbaled partially submerged nozzle for solid propellant rocket engines for providing directional control
[NASA-CASE-XMP-01544] c28 N70-34162
- Omnidirectional wheel
[NASA-CASE-NFS-21309-1] c37 N74-18125
- DIRECTIONAL STABILITY**
- Nose gear steering system for vehicles with main skids to provide directional stability after loss of aerodynamic control
[NASA-CASE-XLA-01804] c02 N70-34160
- System for imposing directional stability on a rocket-propelled vehicle
[NASA-CASE-NFS-21311-1] c20 N76-21275
- DISCONNECT DEVICES**
- Patent data on gas actuated bolt disconnect assembly
[NASA-CASE-XLA-00326] c03 N70-34667
- Remotely actuated quick disconnect mechanism for umbilical cables
[NASA-CASE-XLA-00711] c03 N71-12258
- Remotely actuated quick disconnect for tubular umbilical conduits used to transfer fluids from ground to rocket vehicle
[NASA-CASE-XLA-01396] c03 N71-12259
- Design and development of quick release connector
[NASA-CASE-XLA-01141] c15 N71-13789
- Split nut and bolt separation device
[NASA-CASE-XNP-06914] c15 N71-21489

DISCONTINUITY

Electrical circuit selection device for
simulating stage separation of flight vehicle
[NASA-CASE-XKS-04631] c10 N71-23663

Quick disconnect duct coupling device for
single-handed operation
[NASA-CASE-MFS-20395] c15 N71-24903

Breakaway multiwire electrical cable connector
with particular application for umbilical type
cables
[NASA-CASE-NFO-11140] c15 N72-17455

Torsional disconnect device for releasably
coupling distal ends of fluid conduits
[NASA-CASE-NFO-10704] c15 N72-20445

Frangible connecting link suitable for rocket
stage separation
[NASA-CASE-MSC-11849-1] c15 N72-22488

Gas operated quick disconnect coupling for
umbilical connectors
[NASA-CASE-NPO-11202] c15 N72-25450

Quick disconnect filter coupling
[NASA-CASE-MFS-22323-1] c37 N76-14463

Positive isolation disconnect
[NASA-CASE-MSC-16043-1] c37 N77-15397

DISCONTINUITY

Servocontrol system for measuring local stresses
at geometric discontinuity in stressed material
[NASA-CASE-XLA-08530] c32 N71-25360

DISCRIMINATORS

Detector assembly for discriminating first
signal with respect to presence or absence of
second signal at time of occurrence of first
signal
[NASA-CASE-XMP-00701] c09 N70-40272

Difference indicating circuit used in
conjunction with device measuring
gravitational fields
[NASA-CASE-XNP-08274] c10 N71-13537

Describing frequency discriminator using digital
logic circuits and supplying single binary
output signal
[NASA-CASE-MFS-14322] c08 N71-18692

Circuit design for determining amount of
photomultiplier tube light detection utilizing
variable current source and dark current
signals of opposite polarity
[NASA-CASE-XMS-03478] c14 N71-21040

Characteristics of comparator circuits for
comparison of binary numbers in information
processing system
[NASA-CASE-XNP-04819] c08 N71-23295

Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-3] c33 N75-19520

Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-2] c33 N75-25041

DISPENSERS

Liquid aerosol dispenser with explosively driven
piston to compress light gas to extremely high
pressure
[NASA-CASE-MFS-20829] c12 N72-21310

Potable water dispenser
[NASA-CASE-MFS-21115-1] c54 N74-12779

Lyophilized spore dispenser
[NASA-CASE-LAR-10544-1] c37 N74-13178

Metering gun for dispensing precisely measured
charges of fluid
[NASA-CASE-MFS-21163-1] c54 N74-17853

Automatic fluid dispenser
[NASA-CASE-ARC-10820-1] c54 N75-32766

DISPENSING

Apparatus for mechanically dispersing ultrafine
metal powders subjected to shock waves
[NASA-CASE-XLE-04946] c17 N71-24911

DISPERSIONS

Method for producing alkali metal dispersions of
high purity
[NASA-CASE-XNP-08876] c17 N73-28573

Apparatus for measuring a sorbate dispersed in a
fluid stream
[NASA-CASE-ARC-10896-1] c34 N75-32389

DISPLACEMENT

Bi-metallic fluid displacement apparatus --- for
stirring and heating stored gases and liquids
[NASA-CASE-ARC-10441-1] c35 N74-15126

DISPLACEMENT MEASUREMENT

Null-type vacuum microbalance for measuring
minute mechanical displacements
[NASA-CASE-XAC-00472] c15 N70-40180

Development and characteristics of self-
calibrating displacement transducer for

SUBJECT INDEX

measuring magnitude and frequency of
displacement of bodies
[NASA-CASE-XLA-00781] c09 N71-22999

Gas bearing for model support with capacity for
measuring angular displacement of model in
bearing
[NASA-CASE-XLA-09346] c15 N71-28740

Method and apparatus for remote measurement of
displacement of marks on specimen undergoing
tensile test
[NASA-CASE-NPO-10778] c14 N72-11364

Miniature muscle displacement transducer
[NASA-CASE-NPO-13519-1] c33 N76-19338

DISPLAY DEVICES

Integrated time shared instrumentation display
for aerospace vehicle simulators
[NASA-CASE-XLA-01952] c08 N71-12507

Data processing and display system for terminal
guidance of F-15 aircraft
[NASA-CASE-XPR-00756] c02 N71-13421

Fluidic-thermochromic display device
[NASA-CASE-ERC-10031] c12 N71-18603

Cathode ray tube system for displaying ones and
zeros in binary wave train
[NASA-CASE-XGS-04987] c08 N71-20571

Optical projector system for establishing
optimum arrangement of instrument displays in
aircraft, spacecraft, other vehicles, and
industrial instrument consoles
[NASA-CASE-XNP-03853] c23 N71-21882

Optical monitor panel consisting of translucent
screen with test or meter information
projected onto it from rear for application in
control rooms of missile launching and
tracking stations
[NASA-CASE-XKS-03509] c14 N71-23175

Binary to decimal decoder logic circuit design
with feedback control and display device
[NASA-CASE-XKS-06167] c08 N71-24890

Noninterruptable digital counter circuit design
with display device for pulse frequency
modulation
[NASA-CASE-XNP-09759] c08 N71-24891

Data acquisition system for converting displayed
analog signal to digital values
[NASA-CASE-NFO-10344] c10 N71-26544

Plasma-fluidic hybrid display system combining
high brightness and memory characteristics
[NASA-CASE-ERC-10100] c09 N71-33519

System for digitizing graphic displays
[NASA-CASE-NPO-10745] c08 N72-22164

Digital video system for displaying image and
alphanumeric data on cathode ray tube
[NASA-CASE-NPO-11342] c09 N72-25248

Development of apparatus for mounting scientific
experiments in spacecraft to permit
utilization without maneuvering spacecraft
[NASA-CASE-MSC-12372-1] c31 N72-25842

Development and characteristics for
automatically displaying digits in any desired
order using optical techniques
[NASA-CASE-XKS-00348] c09 N73-14215

Situational display system of cathode ray tubes
to assist pilot in aircraft control
[NASA-CASE-ERC-10350] c14 N73-20474

Device for displaying and recording angled views
of samples to be viewed by microscope
[NASA-CASE-GSC-11690-1] c14 N73-28499

Transparent switchboard which permits optical
display devices to be adapted for use in man
machine communications
[NASA-CASE-MSC-13746-1] c10 N73-32143

Recorder/processor apparatus --- for optical
data processing
[NASA-CASE-GSC-11553-1] c35 N74-15831

Rotating raster generator
[NASA-CASE-PRC-10071-1] c32 N74-20813

G-load measuring and indicator apparatus --- for
aircraft
[NASA-CASE-ARC-10806] c06 N74-27872

Field sequential stereo television
[NASA-CASE-MSC-12616-1] c32 N74-32601

X-Y alphanumeric character generator for
oscilloscopes
[NASA-CASE-GSC-11582-1] c33 N75-19517

Full color hybrid display for aircraft simulators
[NASA-CASE-ARC-10903-1] c09 N76-10148

Projection system for display of parallax and
perspective

SUBJECT INDEX

DYE LASERS

[NASA-CASE-MFS-23194-1] c74 N76-13909
 Turbulence intensity indicator
 [NASA-CASE-LAR-11833-1] c06 N76-31229
 EKG and ultrasonoscope display
 [NASA-CASE-ARC-10994-2] c52 N77-15619
 Crosswind landing gear position indicator
 [NASA-CASE-LAR-11941-1] c06 N77-20098
 Binocular device for displaying numerical
 information in field of view
 [NASA-CASE-LAR-11782-1] c74 N77-20882

DISSIPATION
 Dissipative voltage regulator system for
 minimizing heat dissipation
 [NASA-CASE-GSC-10891-1] c10 N71-26626

DISSOCIATION
 Solar hydrogen generator
 [NASA-CASE-LAR-11361-1] c44 N77-22607

DISSOLVING
 Apparatus for mixing two or more liquids under
 zero gravity conditions
 [NASA-CASE-LAR-10195-1] c15 N73-19458

DISTANCE MEASURING EQUIPMENT
 Binary coded sequential acquisition ranging
 system for distance measurements
 [NASA-CASE-NPO-11194] c08 N72-25209
 Apparatus for determining distance to lighting
 strokes from single station by magnetic and
 electric field sensing antennas
 [NASA-CASE-KSC-10698] c07 N73-20175

DISTILLATION EQUIPMENT
 Utilization of solar radiation by solar still
 for converting salt and brackish water into
 potable water
 [NASA-CASE-XMS-04533] c15 N71-23086
 Purification apparatus for vaporization and
 fractional distillation of liquids
 [NASA-CASE-XNP-08124] c15 N71-27184
 U shaped heated tube for distillation and
 purification of liquid metals
 [NASA-CASE-XNP-08124-2] c06 N73-13129

DISTRIBUTED AMPLIFIERS
 Broadband distribution amplifier with
 complementary pair transistor output stages
 [NASA-CASE-NPO-10003] c10 N71-26415

DISTRIBUTORS
 High voltage distributor
 [NASA-CASE-GSC-11849-1] c33 N76-16332

DIVERGENT NOZZLES
 Jet exhaust noise suppressor
 [NASA-CASE-LEW-11286-1] c07 N74-27490

DIVIDERS
 A synchronous binary array divider
 [NASA-CASE-ERC-10180-1] c60 N74-20836

DOCUMENT STORAGE
 Describing device for flagging punched business
 cards
 [NASA-CASE-XLA-02705] c08 N71-15908

DOORS
 Design and specifications of emergency escape
 system for spacecraft structures
 [NASA-CASE-MSC-12086-1] c 5 N71-12345

DOPPLER EFFECT
 Doppler frequency shift correction device for
 multiplex communication with applications
 Technology Satellites
 [NASA-CASE-XGS-02749] c07 N69-39978
 Describing laser Doppler velocimeter for
 measuring mean velocity and turbulence of
 fluid flow
 [NASA-CASE-MFS-20386] c21 N71-19212
 Doppler compensated communication system for
 locating supersonic transport position
 [NASA-CASE-GSC-10087-4] c07 N73-20174
 Doppler shift system --- system for measuring
 velocities of radiating particles
 [NASA-CASE-BQN-10740-1] c72 N74-19310

DOPPLER RADAR
 Cooperative Doppler radar system for avoiding
 midair collisions
 [NASA-CASE-LAR-10403] c21 N71-11766

DOSIMETERS
 Development of dosimeter for measuring absorbed
 dose of high energy ionizing radiation
 [NASA-CASE-XLA-03645] c14 N71-20430

DRAG CHUTES
 Deployment system for flexible wing with rigid
 superstructure
 [NASA-CASE-XIA-01220] c02 N70-41863

Lightweight, variable solidity knitted parachute
 fabric --- for aerodynamic decelerators
 [NASA-CASE-LAR-10776-1] c02 N74-10034

DRAG MEASUREMENT
 Device for measuring drag forces in flight tests
 [NASA-CASE-XLA-00113] c14 N70-33386
 Electric analog for measuring induced drag on
 nonplanar airfoils
 [NASA-CASE-XLA-00755] c01 N71-13410
 Electric analog for measuring induced drag on
 nonplanar airfoils
 [NASA-CASE-XLA-05828] c01 N71-13411
 Impact energy absorber with decreasing
 absorption rate
 [NASA-CASE-XLA-01530] c14 N71-23092

DRAG REDUCTION
 Directed fluid stream for propeller blade
 loading control
 [NASA-CASE-XAC-00139] c02 N70-34856
 Aircraft wheel spray drag alleviator for dual
 tandem landing gear
 [NASA-CASE-XLA-01583] c02 N70-36825

DRIFT (INSTRUMENTATION)
 Automatic measuring and recording of gain and
 zero drift characteristics of electronic
 amplifier
 [NASA-CASE-XMS-05562-1] c09 N69-39986
 Solar radiation direction detector and device
 for compensating degradation of photocells
 [NASA-CASE-XLA-00183] c14 N70-40239
 Failure detection and control means for improved
 drift performance of a gimballed platform system
 [NASA-CASE-MFS-23551-1] c04 N76-26175

DRILL BITS
 Impact bit for cutting, collecting, and storing
 samples such as lunar rock cuttings
 [NASA-CASE-XNP-01412] c15 N70-42034
 Hole cutter --- drill bits and rotating shaft
 [NASA-CASE-MFS-22649-1] c37 N75-25186

DRILLS
 Rotary impact-type rock drill for recovering
 rock cuttings
 [NASA-CASE-XNP-07478] c14 N69-21923
 Auger-type soil penetrometer for burrowing into
 soil formations
 [NASA-CASE-XNP-05530] c14 N73-32321
 Adjustable chamfering tool
 [NASA-CASE-NPO-10857-1] c37 N77-22478

DRIVES
 Inverter drive circuit for semiconductor switch
 [NASA-CASE-LEW-10233] c10 N71-27126

DROPS (LIQUIDS)
 Development of droplet monitoring probe for use
 in analysis of droplet propagation in
 mixed-phase fluid stream
 [NASA-CASE-NPO-10985] c14 N73-20478

DRUGS
 Automated analysis of oxidative metabolites
 [NASA-CASE-ARC-10469-1] c25 N75-12086

DRY CELLS
 Energy source with tantalum capacitors in
 parallel and miniature silver oxide button
 cells for initiating pyrotechnic devices on
 spacecraft and rocket vehicles
 [NASA-CASE-LAR-10367-1] c03 N70-26817

DRYING
 Drying chamber for photographic sheet material
 [NASA-CASE-GSC-11074-1] c14 N73-28489

DRYING APPARATUS
 Gas purged dry box glove reducing permeation of
 air or moisture into dry box or isolator by
 diffusion through glove
 [NASA-CASE-XLE-02531] c05 N71-23080

DUCTS
 Quick disconnect duct coupling device for
 single-handed operation
 [NASA-CASE-MFS-20395] c15 N71-24903
 Externally supported internally stabilized
 flexible duct joint
 [NASA-CASE-MFS-19194-1] c37 N76-14460

DUST COLLECTORS
 Device for removing plastic dust cover from
 digital computer disk packs for inspection and
 cleaning
 [NASA-CASE-LAR-10590-1] c15 N70-26819

DYE LASERS
 Infrared tunable dye laser with nonlinear
 wavelength mixing crystal in optical cavity
 [NASA-CASE-ARC-10463-1] c09 N73-32111

- Laser head for simultaneous optical pumping of several dye lasers --- with single flash lamp
[NASA-CASE-LAR-11341-1] c36 N75-19655
Two wavelength double pulse tunable dye laser
[NASA-CASE-LAR-12012-1] c36 N77-10517
- DYES**
Dye penetrant and technique for nondestructive tests of solid surfaces contacted by liquid oxygen
[NASA-CASE-XMF-02221] c18 N71-27170
- DYNAMIC CHARACTERISTICS**
Dynamic sensor for gas pressure or density measurement
[NASA-CASE-XAC-02877] c14 N70-41681
Design of precision vertical alignment system using laser with gravitationally sensitive cavity
[NASA-CASE-ARC-10444-1] c16 N73-33397
- DYNAMIC CONTROL**
Motion restraining device --- for dissipating at a controlled rate the force of a moving body
[NASA-CASE-WFO-13619-1] c37 N75-22748
- DYNAMIC LOADS**
Multilegged support system for wind tunnel test models subjected to thermal dynamic loading
[NASA-CASE-XLA-01326] c11 N71-21481
Apparatus for measuring load on cable under static or dynamic conditions comprising pulleys pivoting structure against restraint of tension strap
[NASA-CASE-XMS-04545] c15 N71-22878
Development and characteristics of device for indicating and recording magnitude of force applied in axial direction
[NASA-CASE-HSC-15626-1] c14 N72-25411
- DYNAMIC MODULUS OF ELASTICITY**
Apparatus for testing metallic and nonmetallic beams or rods by bending at high temperatures in vacuum or inert atmosphere
[NASA-CASE-XLE-01300] c15 N70-41993
- DYNAMIC RESPONSE**
Lunar and planetary gravity simulator to test vehicular response to landing
[NASA-CASE-XLA-00493] c11 N70-34786
Pressure sensor network for measuring liquid dynamic response in flight including fuel tank acceleration, liquid slosh amplitude, and fuel depth monitoring
[NASA-CASE-XLA-05541] c12 N71-26387
Response analyzing apparatus for liquid vapor interface sensor of sloshing rocket propellant
[NASA-CASE-MPS-11204] c14 N71-29134
- DYNAMIC STRUCTURAL ANALYSIS**
Development of system for measuring damping characteristics of structure or system subjected to random forces or influences
[NASA-CASE-ARC-10154-1] c14 N72-22440
- DYNAMIC TESTS**
Hydraulic support equipment for full scale dynamic testing of large rocket vehicle under free flight conditions
[NASA-CASE-XMF-01772] c11 N70-41677
Hydraulic support apparatus for dynamic testing of space vehicles under near-free flight conditions
[NASA-CASE-XMF-03248] c11 N71-10604
- DYNAMOMETERS**
Dynamometer measuring microforce thrust produced by ion engine
[NASA-CASE-XLE-00702] c14 N70-40203
Development of thrust dynamometer for measuring performance of jet and rocket engines
[NASA-CASE-XLE-05260] c14 N71-20429
- *
- E**
- EAR**
Ear oximeter for monitoring blood oxygenation and pressure, pulse rate, and pressure pulse curve, using dc and ac amplifiers
[NASA-CASE-XAC-05422] c04 N71-23185
- EARTH (PLANET)**
Camera arrangement --- for satellite scanning of earth or sky
[NASA-CASE-GSC-12032-2] c35 N76-19408
- EARTH ATMOSPHERE**
Ablation sensor for measuring surface ablation rate of material on vehicles entering earths atmosphere on entry into planetary atmospheres
[NASA-CASE-XLA-01791] c14 N71-22991
- EARTH ORBITS**
Electric furnace for vacuum and zero gravity melting of high melting point materials during earth orbit
[NASA-CASE-MFS-20710] c11 N72-23215
Design and development of space shuttle system for delivering payload to earth orbit or celestial orbit
[NASA-CASE-HSC-12391] c30 N73-12884
- ECHOS**
A miniature implantable ultrasonic echosonometer
[NASA-CASE-ARC-11035-1] c52 N77-15621
- ECONOMIC ANALYSIS**
Economical satellite aided vehicle avoidance system for preventing midair collisions
[NASA-CASE-ERC-10419] c21 N72-21631
- EFFICIENCY**
Recovering efficiency of solar cells damaged by environmental radiation through thermal annealing
[NASA-CASE-XGS-04047-2] c03 N72-11062
High efficiency multifrequency feed
[NASA-CASE-GSC-11909] c32 N74-20863
- EFFLUENTS**
Vortex generator for controlling the dispersion of effluents in a flowing liquid
[NASA-CASE-LAR-12045-1] c34 N77-24423
- EJECTION**
Apparatus for ejecting covers of instrument packages using differential pressure principle
[NASA-CASE-XMF-04132] c15 N70-29502
- EJECTION SEATS**
Ejector for separating astronaut from ejection seat during prelaunch or initial launch phase of flight
[NASA-CASE-XMS-04625] c05 N71-20718
- EJECTORS**
Automatic ejection valve for attitude control and midcourse guidance of space vehicles
[NASA-CASE-XNP-00676] c15 N70-38996
Ejector for separating astronaut from ejection seat during prelaunch or initial launch phase of flight
[NASA-CASE-XMS-04625] c05 N71-20718
Latching mechanism with pivoting catch and self-contained spring ejector
[NASA-CASE-XLA-03538] c15 N71-24897
- ELASTIC BODIES**
Belleville spring assembly with elastic guides having low hysteresis
[NASA-CASE-XNP-09452] c15 N69-27504
Development of systems for automatically and continually suppressing or attenuating bending motion in elastic bodies
[NASA-CASE-XAC-05632] c32 N71-23971
Device for measuring tensile forces
[NASA-CASE-MPS-21728-1] c35 N74-27865
- ELASTIC DEFORMATION**
Measuring shear-creep compliance of solid and liquid materials used in spacecraft components
[NASA-CASE-XLE-01481] c14 N71-10781
Development of systems for automatically and continually suppressing or attenuating bending motion in elastic bodies
[NASA-CASE-XAC-05632] c32 N71-23971
- ELASTIC MEDIA**
Miniature vibration isolator utilizing elastic tubing material
[NASA-CASE-XLA-01019] c15 N70-40156
- ELASTIC PROPERTIES**
Elastic universal joint for rocket motor mounting
[NASA-CASE-XNP-00416] c15 N70-36947
Resilient vehicle wheel for lunar surface travel
[NASA-CASE-MPS-20400] c31 N71-18611
Threadless fastener apparatus comprising receiving apertures for plurality of articles, self-locked condition, and capable of using nonmalleable materials in both ends
[NASA-CASE-XFR-05302] c15 N71-23254
Chemical and elastic properties of fluorinated polyurethanes
[NASA-CASE-WFO-10767-1] c06 N73-33076
Meter for use in detecting tension in straps having predetermined elastic characteristics

SUBJECT INDEX

ELECTRIC CONNECTORS

- [NASA-CASE-MFS-22189-1] c35 N75-19615
- ELASTIC SHEETS**
- Hot forming of plastic sheets [NASA-CASE-IMS-05516] c15 N71-17803
- ELASTOMERS**
- Describing metal valve pintle with encapsulated elastomeric body [NASA-CASE-MSC-12116-1] c15 N71-17648
- Development of apparatus for measuring successive increments of strain on elastomers [NASA-CASE-IMP-04680] c15 N71-19489
- Preparation of elastomeric diamine silazane polymers [NASA-CASE-IMP-04133] c06 N71-20717
- Leak resistant bonded elastomeric seal for secondary electrochemical cells [NASA-CASE-IGS-02631] c03 N71-23006
- Conductive elastomeric extensometer [NASA-CASE-MFS-21049-1] c52 N74-27864
- A machine for use in monitoring fatigue life for a plurality of elastomeric specimens [NASA-CASE-NFO-13731-1] c39 N76-17427
- Flame retardant elastomeric compositions [NASA-CASE-MSC-14331-2] c27 N76-24408
- Flame retardant elastomeric compositions [NASA-CASE-MSC-14331-3] c27 N76-24409
- Vacuum pressure molding technique [NASA-CASE-LAR-10073-1] c37 N76-24575
- Method of making hollow elastomeric bodies [NASA-CASE-NPO-13535-1] c37 N76-31524
- ELECTRETS**
- Charge injection method and apparatus of producing large area electrets [NASA-CASE-MPS-23186-1] c33 N76-23483
- ELECTRIC ARCS**
- Magnetically diffused radial electric arc heater [NASA-CASE-XLA-00330] c33 N70-34540
- Controlled arc spot welding method [NASA-CASE-IMP-00392] c15 N70-34814
- Triggering system for electric arc driven impulse wind tunnel [NASA-CASE-IMP-00411] c11 N70-36913
- Electric arc device for minimizing electrode ablation and heating gases to supersonic or hypersonic wind tunnel temperatures [NASA-CASE-XAC-00319] c25 N70-41628
- Electric arc heater with supersonic nozzle and fixed arc length for use in high temperature wind tunnels [NASA-CASE-XAC-01677] c09 N71-20816
- Arc electrode of graphite with tantalum ball tip [NASA-CASE-XLE-04788] c09 N71-22987
- High powered arc electrodes --- producing solar simulator radiation [NASA-CASE-LEW-11162-1] c33 N74-12913
- Electric arc light source having undercut recessed anode [NASA-CASE-ARC-10266-1] c33 N75-29318
- ELECTRIC BATTERIES**
- Spacecraft battery seals [NASA-CASE-XGS-03864] c15 N69-24320
- Sealed electric storage battery with gas manifold interconnecting each cell [NASA-CASE-IMP-03378] c03 N71-11051
- Battery charging system with cell to cell voltage balance [NASA-CASE-XGS-05432] c03 N71-19438
- Development and characteristics of battery charging circuits with coulometer for control of available current [NASA-CASE-GSC-10487-1] c03 N71-24719
- Heat activated emf cells with aluminum anode [NASA-CASE-LEW-11359] c03 N71-28579
- Development of device for simulating charge and discharge cycle of battery in synchronous orbit [NASA-CASE-GSC-11211-1] c03 N72-25020
- Storage battery comprising negative plates of a wedge shaped configuration --- for preventing shape change induced malfunctions [NASA-CASE-NFO-11806-1] c44 N74-19693
- Battery testing device --- for testing cells of multiple-cell battery [NASA-CASE-MFS-20761-1] c44 N74-27519
- Rapid activation and checkout device for batteries [NASA-CASE-MFS-22749-1] c44 N76-14601
- Zinc-halide battery with molten electrolyte [NASA-CASE-NFO-11961-1] c44 N76-18643
- Multi-cell battery protection system [NASA-CASE-LEW-12039-1] c44 N76-23713
- Lead-oxygen dc power supply system having a closed loop oxygen and water system [NASA-CASE-MFS-23059-1] c44 N76-27664
- ELECTRIC BRIDGES**
- Pulsed excitation voltage circuit for strain gage bridge transducers [NASA-CASE-FRC-10036] c09 N72-22200
- Bridge-type gain control circuit [NASA-CASE-GSC-10786-1] c10 N72-28241
- Diode-quad bridge circuit means [NASA-CASE-ABC-10364-2(B)] c33 N74-14941
- Diode-quad bridge circuit means [NASA-CASE-ARC-10364-2] c33 N75-25041
- Germanium coated microbridge and method [NASA-CASE-MFS-23274-1] c76 N76-30084
- ELECTRIC CELLS**
- Expanding and contracting connector strip for solar cell array of Nimbus satellite [NASA-CASE-IGS-01395] c03 N69-21539
- Design and characteristics of heat activated electric cell with anode made from one or more alkali metals and cathode made from oxidizing material [NASA-CASE-LEW-11358] c03 N71-26084
- Development and characteristics of ion-exchange membrane and electrode assembly for fuel cells or electrolysis cells [NASA-CASE-IMS-02063] c03 N71-29044
- ELECTRIC CHARGE**
- Indicator device for monitoring charge of wet cell battery, using semiconductor light emitter and photodetector [NASA-CASE-NPO-10194] c03 N71-20407
- Automatically charging battery of electric storage cells [NASA-CASE-IMP-04758] c03 N71-24605
- ELECTRIC CHOPPERS**
- Monostable multivibrator for conserving power in spacecraft systems [NASA-CASE-GSC-10082-1] c10 N72-20221
- ELECTRIC COILS**
- Broadband chokes and absorbers to reduce spurious radiation patterns of antenna array caused by support structures [NASA-CASE-IMS-05303] c07 N69-27462
- ELECTRIC CONDUCTORS**
- Hollow spherical electrode for shielding dielectric junction between high voltage conductor and insulator [NASA-CASE-XLE-03778] c09 N69-21542
- Conductor for connecting parallel cells into submodules in series to form solar cell matrix [NASA-CASE-NFO-10821] c03 N71-19545
- Electrical switching device comprising conductive liquid confined within square loop of deformable nonconductive tubing also used for leveling [NASA-CASE-NFO-10037] c09 N71-19610
- Dry electrode design with wire sandwiched between two flexible conductive discs for monitoring physiological responses [NASA-CASE-FRC-10029] c09 N71-24618
- Development of process for forming insulating layer between two electrical conductor or semiconductor materials [NASA-CASE-LEW-10489-1] c15 N72-25447
- Improved injector with porous plug for bubbles of gas into feed lines of electrically conductive liquid [NASA-CASE-NFO-11377] c15 N73-27406
- Solar cell grid patterns [NASA-CASE-NPO-13087-2] c44 N76-31666
- Velocity measurement system [NASA-CASE-MFS-23363-1] c35 N76-33469
- Shielded conductor cable system [NASA-CASE-MSC-12745-1] c33 N77-13338
- ELECTRIC CONNECTORS**
- Distribution of currents to circuits using electrical adaptor [NASA-CASE-XLA-01288] c09 N69-21470
- Fixture for simultaneously supporting several components for electrical testing [NASA-CASE-IMP-06032] c09 N69-21926
- Releasable coupling device designed to receive and retain matching ends of electrical connectors [NASA-CASE-IMS-07846-1] c09 N69-21927
- Electrical feedthrough connection for printed circuit boards

ELECTRIC CONTACTS

[NASA-CASE-XMF-01483] c14 N69-27431
Electrical connector pin with wiping action to assure reliable contact
[NASA-CASE-XMF-04238] c09 N69-39734
Rectangular electric conductors for conductor cables to withstand spacecraft vibration and controlled atmosphere
[NASA-CASE-MFS-14741] c09 N70-20737
Patent data on terminal insert connector for flat electric cables
[NASA-CASE-XMF-00324] c09 N70-34596
Electric connector for printed cable to printed cable or to printed board
[NASA-CASE-XMF-00369] c09 N70-36494
Electrical connection for printed circuits on common board, using bellows principle in rivet
[NASA-CASE-XNP-05082] c15 N70-41960
Method of making molded electric connector for use with flat conductor cables
[NASA-CASE-XMF-03498] c15 N71-15986
Design and development of electric connectors for rigid and semirigid coaxial cables
[NASA-CASE-XNP-04732] c09 N71-20851
Connector internal force gage for measuring strength of electrical connection
[NASA-CASE-XNP-03918] c14 N71-23087
Maintaining current flow through solar cells with open connection using shunting diode
[NASA-CASE-XLE-04535] c03 N71-23354
Electrical connections for thin film hybrid microcircuits
[NASA-CASE-XMS-02182] c10 N71-28783
Breakaway multiwire electrical cable connector with particular application for umbilical type cables
[NASA-CASE-NPO-11140] c15 N72-17455
Reliability of electrical connectors after heat sterilization
[NASA-CASE-NPO-10694] c09 N72-20200
Development of electric connector and pin assembly with radio frequency absorbing sleeve to reduce radio frequency interference
[NASA-CASE-XLA-02609] c09 N72-25256
Electrical interconnection of unilluminated solar cells in solar battery array
[NASA-CASE-GSC-10344-1] c03 N72-27053
Separable flat cable connector with isolated electrical contacts
[NASA-CASE-MFS-20757] c09 N72-28225
Device for configuring multiple leads --- method for connecting electric leads to printed circuit board
[NASA-CASE-MFS-22133-1] c33 N74-26977
Connector --- for connecting circuits on different layers of multilayer printed circuit boards
[NASA-CASE-LPR-11709-1] c37 N76-27567
Percutaneous connector device
[NASA-CASE-KSC-10849-1] c52 N77-14738
Magnetic electrical connectors for biomedical percutaneous implants
[NASA-CASE-KSC-11030-1] c52 N77-25772

ELECTRIC CONTACTS
Solid state switching circuit design to increase current capacity of low rated relay contacts
[NASA-CASE-XNP-09228] c09 N69-27500
Characteristics of hermetically sealed electric switch with flexible operating capability
[NASA-CASE-XNP-09808] c09 N71-12518
Electrode connection for n-on-p silicon solar cell
[NASA-CASE-XLP-04787] c03 N71-20492
Development of slip ring assembly with inner and outer peripheral surfaces used as electrical contacts for brushes
[NASA-CASE-XMP-01049] c15 N71-23049
Separable flat cable connector with isolated electrical contacts
[NASA-CASE-MFS-20757] c09 N72-28225
Electrostatic measurement system --- for contact-electrifying a dielectric
[NASA-CASE-MFS-22129-1] c33 N75-18477
Liquid metal slip ring
[NASA-CASE-LEW-12277-1] c33 N76-28472
Encapsulated solar cell modules
[NASA-CASE-LEW-12185-1] c44 N77-15490
Process for preparing liquid metal electrical contact device
[NASA-CASE-LPW-11978-1] c33 N77-26385

SUBJECT INDEX

ELECTRIC CONTROL

Switching series regulator with gating control network
[NASA-CASE-XMS-09352] c09 N71-23316
Power factor control system for ac induction motors
[NASA-CASE-MFS-23280-1] c33 N76-28471

ELECTRIC CORONA
Charge injection method and apparatus of producing large area electrets
[NASA-CASE-MFS-23186-1] c33 N76-23483

ELECTRIC CURRENT
Including didymium hydrate in nickel hydroxide of positive electrode of storage batteries to increase ampere hour capacity
[NASA-CASE-XGS-03505] c03 N71-10608
Development of in-line fuse device for protection of electric circuits from excessive currents and voltages
[NASA-CASE-MSC-12135-1] c09 N71-12526
Micromicroampere current measuring circuit, with two subminiature thermionic diodes with filament cathodes
[NASA-CASE-XNP-00384] c09 N71-13530
Connector internal force gage for measuring strength of electrical connection
[NASA-CASE-XNP-03918] c14 N71-23087
Electric circuit for producing high current pulse having fast rise and fall time
[NASA-CASE-XMS-04919] c09 N71-23270
Electric circuit for reversing direction of current flow
[NASA-CASE-XNP-00952] c10 N71-23271
Maintaining current flow through solar cells with open connection using shunting diode
[NASA-CASE-XLE-04535] c03 N71-23354
Color television system utilizing single gun current sensitive color cathode ray tube
[NASA-CASE-ERC-10098] c09 N71-28618
Current dependent variable inductance for input filter chokes of ac or dc power supplies
[NASA-CASE-ERC-10139] c09 N72-17154
Amplifying circuit with constant current source for accumulator load and high gain voltage amplification
[NASA-CASE-NPO-11023] c09 N72-17155
Commutator for steering precisely controlled bidirectional currents through numerous loads by use of magnetic core shift registers
[NASA-CASE-NPO-10743] c08 N72-21199
Current protection equipment for saturable core transformers
[NASA-CASE-ERC-10075-2] c09 N72-22196
Development of thermal to electric power conversion system using solid state switches of electrical currents to load for Seebeck effect compensation
[NASA-CASE-NPO-11388] c03 N72-23048
Load current sensor for series pulse width modulated power supply
[NASA-CASE-GSC-10656-1] c09 N72-25249
Electrode with multiple columnar conductors for limiting field emission current
[NASA-CASE-ERC-10015-2] c10 N72-27246
Means of vapor deposition using electric current and evaporator filament
[NASA-CASE-LAR-10541-1] c15 N72-32487
Lightning current measuring systems
[NASA-CASE-KSC-10807-1] c33 N75-26246
Electroexplosive device
[NASA-CASE-NPO-13858-1] c28 N77-17258
Remote lightning monitor system
[NASA-CASE-KSC-11031-1] c33 N77-21319
Lightning current waveform measuring system
[NASA-CASE-KSC-11018-1] c33 N77-21320

ELECTRIC DISCHARGES
Electric discharge apparatus for electrohydraulic explosive forming
[NASA-CASE-XMP-00375] c15 N70-34249
High voltage pulse generator for testing flash and ignition limits of nonmetallic materials in controlled atmospheres
[NASA-CASE-MSC-12178-1] c09 N71-13518
Pulse generating circuit for operation at very high duty cycles and repetition rates
[NASA-CASE-XNP-00745] c10 N71-28960
Rapidly pulsed, high intensity, incoherent light source
[NASA-CASE-XLE-2529-3] c33 N74-20859

Remote lightning monitor system
[NASA-CASE-RSC-11031-1] c33 N77-21319

Electric discharge for treatment of trace
contaminants
[NASA-CASE-ARC-10975-1] c54 N77-24771

ELECTRIC ENERGY STORAGE

Electric current measuring apparatus design
including saturable core transformer and
energy storage device to avoid magnetizing
current errors from transformer output winding
[NASA-CASE-XGS-02439] c14 N71-19431

Lead-oxygen dc power supply system having a
closed loop oxygen and water system
[NASA-CASE-MFS-23059-1] c44 N76-27664

Electrically rechargeable FEDOX flow cell
[NASA-CASE-LEW-12220-1] c44 N77-14581

Gels as battery separators for soluble
electrode cells
[NASA-CASE-LEW-12364-1] c44 N77-22606

ELECTRIC EQUIPMENT

Characteristics of high power, low distortion,
alternating current power amplifier
[NASA-CASE-LAR-10218-1] c09 N70-34559

Design and development of electric generator for
space power system
[NASA-CASE-XLE-04250] c09 N71-20446

Development of electrical system for measuring
high impedance
[NASA-CASE-XMS-08589-1] c09 N71-20569

Design, development, and operating principles of
power supply with starting circuit which is
independent of voltage regulator
[NASA-CASE-XMS-01991] c09 N71-21449

Development of method for improving signal to
noise ratio and accuracy of Wheatstone bridge
type radiation measuring instrument
[NASA-CASE-XLA-02810] c14 N71-25901

Design and development of buck-boost voltage
regulator circuit with additive or subtractive
alternating current impressed on variable
direct current source voltage
[NASA-CASE-GSC-10735-1] c10 N71-26085

Development and characteristics of
electronically resettable fuse with saturable
core current sensing transformer having two
outside legs and center leg
[NASA-CASE-XGS-11177] c09 N71-27001

Development and characteristics of voltage
regulator for connection in series with
alternating current source and load using
three leg, two-window transformer
[NASA-CASE-ERC-10113] c09 N71-27053

Development of electric circuit for production
of different pulse width signals
[NASA-CASE-XLA-07788] c09 N71-29139

Development of solar energy powered heliotrope
assembly to orient solar array toward sun
[NASA-CASE-GSC-10945-1] c21 N72-31637

Development of temperature compensated light
source with components and circuitry for
maintaining luminous intensity independent of
temperature variations
[NASA-CASE-ARC-10467-1] c09 N73-14214

Development and characteristics of hermetically
sealed coaxial package for containing
microwave semiconductor components
[NASA-CASE-GSC-10791-1] c15 N73-14469

Overvoltage protection network
[NASA-CASE-ARC-10197-1] c33 N74-17929

Sprag solenoid brake --- development and
operations of electrically controlled brake
[NASA-CASE-MFS-21846-1] c37 N74-26976

Shock absorbing mount for electrical components
[NASA-CASE-WFO-13253-1] c37 N75-18573

Self-regulating proportionally controlled
heating apparatus and technique
[NASA-CASE-GSC-11752-1] c77 N75-20140

ELECTRIC EQUIPMENT TESTS

Fixture for simultaneously supporting several
components for electrical testing
[NASA-CASE-IMP-06032] c09 N69-21926

Electrical testing apparatus for detecting
amplitude and width of transient pulse
[NASA-CASE-IMP-06519] c09 N71-12519

Variable water load for dissipating large
amounts of electrical power during high
voltage power supply tests
[NASA-CASE-IMP-05381] c09 N71-20842

ELECTRIC FIELD STRENGTH

Low impedance apparatus for measuring
electrostatic field intensity near space
vehicles
[NASA-CASE-XLE-00820] c14 N71-16014

Space environment simulation system for
measuring spacecraft electric field strength
in plasma sheath
[NASA-CASE-XLE-02038] c09 N71-16086

Device for measuring two orthogonal components
of force with gallium flotation of measuring
target for use in vacuum environments
[NASA-CASE-XAC-04885] c14 N71-23790

Apparatus to determine electric field strength
by measuring deflection of electron beam
impinging on target
[NASA-CASE-IMP-06617] c09 N71-24843

ELECTRIC FIELDS

Electric analog for measuring induced drag on
nonplanar airfoils
[NASA-CASE-XLA-00755] c01 N71-13410

Electric analog for measuring induced drag on
nonplanar airfoils
[NASA-CASE-XLA-05828] c01 N71-13411

Instrument for measuring potentials on two
dimensional electric field plot
[NASA-CASE-XLA-08493] c10 N71-19421

Electron beam deflection devices for measuring
electric fields
[NASA-CASE-IMP-10289] c14 N71-23699

Electrodes having array of small surfaces for,
field ionization
[NASA-CASE-ERC-10013] c09 N71-26678

Apparatus for determining distance to lightning
strokes from single station by magnetic and
electric field sensing antennas
[NASA-CASE-RSC-10698] c07 N73-20175

Development and characteristics of apparatus for
measuring intensity of electric field in
atmosphere
[NASA-CASE-KSC-10730-1] c14 N73-32318

Fine particulate capture device
[NASA-CASE-LEW-11583-1] c37 N74-13199

Electric field measuring and display system ---
for cloud formations
[NASA-CASE-KSC-10731-1] c33 N74-27862

Method of electrically pre-stressing insulation
to provide directional increase in dc
potential breakdown
[NASA-CASE-LEW-12273-1] c33 N77-17357

Microcomputerized electric field meter
diagnostic and calibration system
[NASA-CASE-KSC-11035-1] c33 N77-20343

ELECTRIC FILTERS

Describing static inverter with single or
multiple phase output
[NASA-CASE-IMP-00663] c08 N71-18752

Apparatus for filtering input signals
[NASA-CASE-WFO-10198] c09 N71-24806

Active RC filter networks and amplifiers for
deep space magnetic field measurement
[NASA-CASE-XAC-05462-2] c10 N72-17171

Multiloop RC active filter network with low
parameter sensitivity and low amplifier gain
[NASA-CASE-ARC-10192] c09 N72-21245

Development of electric connector and pin
assembly with radio frequency absorbing sleeve
to reduce radio frequency interference
[NASA-CASE-XLA-02609] c09 N72-25256

Filter for third order phase locked loops in
signal receivers
[NASA-CASE-WFO-11941-1] c10 N73-27171

ELECTRIC FUSES

Development of in-line fuse device for
protection of electric circuits from excessive
currents and voltages
[NASA-CASE-HSC-12135-1] c09 N71-12526

Single electrical circuit component combining
diode, fuse, and blown indicator with
elongated tube of heat resistant transparent
material
[NASA-CASE-XMS-03381] c09 N71-22796

ELECTRIC GENERATORS

Regulated dc to dc converter
[NASA-CASE-XGS-03429] c03 N69-21330

Nuclear electric generator for accelerating
charged propellant particles in electrostatic
propulsion system
[NASA-CASE-XLE-00818] c22 N70-34248

Design and development of electric generator for space power system
[NASA-CASE-XLF-04250] c09 N71-20446

Development and characteristics of single or double pulse generator which produces constant width pulses in nanosecond region
[NASA-CASE-XGS-03427] c10 N71-23029

Development of slip ring assembly with inner and outer peripheral surfaces used as electrical contacts for brushes
[NASA-CASE-XMF-01049] c15 N71-23049

Conversion of positive dc voltage to positive dc voltage of lower amplitude
[NASA-CASE-XMF-14301] c09 N71-23188

High temperature ferromagnetic cobalt-base alloy for electrical power generating equipment
[NASA-CASE-XLE-03629] c17 N71-23248

Solid state integrator for converting variable width pulses into analog voltage
[NASA-CASE-XLA-03356] c10 N71-23315

Electric power system with circulatory liquid coolant cooling system
[NASA-CASE-MFS-14114-2] c09 N71-24807

Device utilizing RC rate generators for continuous slow speed measurement
[NASA-CASE-XMF-02966] c10 N71-24863

Device for voltage conversion using controlled pulse widths and arrangements to generate ac output voltage
[NASA-CASE-MFS-10068] c10 N71-25139

Multiple varactor for generating high frequencies with high power and high conversion efficiency
[NASA-CASE-XMF-04958-1] c10 N71-26414

Circuit design for failure sensing and protecting low voltage electric generator and power transmission networks
[NASA-CASE-GSC-10114-1] c10 N71-27366

Electric power system with thermionic diodes and circulatory liquid metal coolant lines
[NASA-CASE-MFS-14114] c33 N71-27862

Power converters for supplying direct current at one voltage from source at another voltage
[NASA-CASE-XER-11046] c09 N72-22203

Inductive-capacitive loops as load insensitive power converters
[NASA-CASE-EBC-10268] c09 N72-25252

Dc to ac to dc converter with transistor driven synchronous rectifiers
[NASA-CASE-GSC-11126-1] c09 N72-25253

Device for converting electromagnetic wave energy into electric power
[NASA-CASE-GSC-11394-1] c09 N73-32109

Heat operated cryogenic electrical generator
[NASA-CASE-NFO-13303-1] c20 N75-24837

Electric power generation system directory from laser power
[NASA-CASE-NFO-13308-1] c36 N75-30524

Smoke generator
[NASA-CASE-ARC-10905-1] c37 N77-13418

Electro-mechanical sine/cosine generator
[NASA-CASE-LAR-11389-1] c33 N77-26387

ELECTRIC IGNITION

Method of making solid propellant rocket motor having reliable high altitude capabilities, long shelf life, and capable of firing with nozzle closure with fused plastic permanent mandrel
[NASA-CASE-XLA-04126] c28 N71-26779

ELECTRIC MOTORS

Automatic control of voltage supply to direct current motor
[NASA-CASE-XMS-04215-1] c09 N69-39987

Electronic circuit system for controlling electric motor speed
[NASA-CASE-XMF-01129] c09 N70-38712

Using electron beam switching for brushless motor commutation
[NASA-CASE-XGS-01451] c09 N71-10677

Direct current electromotive system for regenerative braking of electric motor
[NASA-CASE-XMF-01096] c10 N71-16030

Describing angular position and velocity sensing apparatus
[NASA-CASE-XGS-05680] c14 N71-17585

Reversible current directing circuitry for reversible motor control
[NASA-CASE-XLA-09371] c10 N71-18724

Stepping motor control apparatus exciting windings in proper time sequence to cause motor to rotate in either direction
[NASA-CASE-GSC-10366-1] c10 N71-18772

Electromagnetic braking arrangement for controlling rotor rotation in electric motor
[NASA-CASE-XMP-06936] c15 N71-24695

Electric motor control system with pulse width modulation for providing automatic null seeking servo
[NASA-CASE-XMF-05195] c10 N71-24861

Velocity limiting safety system for motor driven research vehicle
[NASA-CASE-XLA-07473] c15 N71-24895

Design and development of electric motor with stationary field and armature windings which operates on direct current
[NASA-CASE-XGS-05290] c09 N71-25999

Circuits for controlling reversible dc motor
[NASA-CASE-XMF-07477] c09 N71-26092

Pulse duration control device for driving slow response time loads in selected sequence including switching and delay circuits and magnetic storage
[NASA-CASE-XGS-04224] c10 N71-26418

Feedback control for direct current motor to achieve constant speed under varying loads
[NASA-CASE-MFS-14610] c09 N71-28886

Optimal control system for automatic speed regulation of electric driven motor vehicle
[NASA-CASE-NFO-11210] c11 N72-20244

Direct current motor including stationary field windings and stationary armature winding
[NASA-CASE-XGS-07805] c15 N72-33476

Speed control system for dc motor equipped with brushless Hall effect device
[NASA-CASE-MFS-20207-1] c09 N73-32107

A rotary electric device
[NASA-CASE-GSC-12138-1] c33 N77-20344

Three phase full wave dc motor decoder
[NASA-CASE-GSC-11824-1] c33 N77-26386

ELECTRIC NETWORKS

Electric network for monitoring temperatures, detecting critical temperatures, and indicating critical time duration
[NASA-CASE-XMF-01097] c10 N71-16058

Development and characteristics of single or double pulse generator which produces constant width pulses in nanosecond region
[NASA-CASE-XGS-03427] c10 N71-23029

Switching series regulator with gating control network
[NASA-CASE-XMS-09352] c09 N71-23316

Broadband frequency discriminator with resistive captive inductive networks
[NASA-CASE-NFO-10096] c07 N71-24583

ELECTRIC POTENTIAL

Battery charging system with cell to cell voltage balance
[NASA-CASE-XGS-05432] c03 N71-19438

Conversion of positive dc voltage to positive dc voltage of lower amplitude
[NASA-CASE-XMF-14301] c09 N71-23188

Solid state integrator for converting variable width pulses into analog voltage
[NASA-CASE-XLA-03356] c10 N71-23315

Device for monitoring voltage by generating signal when voltages drop below predetermined value
[NASA-CASE-KSC-10020] c10 N71-27338

Plotter device for automatically drawing equipotential lines on sheet of resistance paper
[NASA-CASE-NFO-11134] c09 N72-21246

Pulsed excitation voltage circuit for strain gage bridge transducers
[NASA-CASE-FRC-10036] c09 N72-22200

Power converters for supplying direct current at one voltage from source at another voltage
[NASA-CASE-XER-11046] c09 N72-22203

Continuously variable, voltage-controlled phase shifter
[NASA-CASE-NFO-11129] c09 N72-33204

ELECTRIC POWER

Switching circuit with regeneratively connected transistors eliminating power consumption when not in use
[NASA-CASE-XMF-02654] c10 N70-42032

Variable water load for dissipating large amounts of electrical power during high

- voltage power supply tests
[NASA-CASE-IMP-05381] c09 N71-20842
- ELECTRIC POWER PLANTS**
Ocean thermal plant
[NASA-CASE-KSC-11034-1] c44 N77-21666
- ELECTRIC POWER SUPPLIES**
Current dependent variable inductance for input filter chokes of ac or dc power supplies
[NASA-CASE-PFC-10139] c09 N72-17154
Development of thermal to electric power conversion system using solid state switches of electrical currents to load for Seebeck effect compensation
[NASA-CASE-NPO-11388] c03 N72-23048
Development of electrical circuit for suppressing oscillations across inductor operating in resonant mode
[NASA-CASE-ERC-10403-1] c10 N73-26228
Powerplexer for distribution of dc power levels to loads which require different voltages
[NASA-CASE-MSC-12396-1] c03 N73-31988
Reliable electrical element heater using plural wire system and backup power sources
[NASA-CASE-MFS-21462-1] c33 N74-14935
- ELECTRIC POWER TRANSMISSION**
Power switch with transfluxor type magnetic core
[NASA-CASE-NPO-10242] c09 N71-24803
Circuit design for failure sensing and protecting low voltage electric generator and power transmission networks
[NASA-CASE-GSC-10114-1] c10 N71-27366
Powerplexer for distribution of dc power levels to loads which require different voltages
[NASA-CASE-MSC-12396-1] c03 N73-31988
Microwave power transmission system wherein level of transmitted power is controlled by reflections from receiver
[NASA-CASE-MFS-21470-1] c44 N74-19870
RF beam center location method and apparatus for power transmission system
[NASA-CASE-NPO-13821-1] c44 N76-26692
- ELECTRIC PROPULSION**
Electric propulsion engine test chamber
[NASA-CASE-XLB-00252] c11 N70-34844
- ELECTRIC PULSES**
RC transistor circuit to indicate each pulse of pulse train and occurrence of nth pulse
[NASA-CASE-IMP-00906] c09 N70-41655
Design and development of variable pulse width multiplier
[NASA-CASE-XLA-02850] c09 N71-20447
Piezoelectric transducer for monitoring sound waves of physiological origin
[NASA-CASE-INS-05365] c14 N71-22993
Development and characteristics of single or double pulse generator which produces constant width pulses in nanosecond region
[NASA-CASE-XGS-03427] c10 N71-23029
Solid state integrator for converting variable width pulses into analog voltage
[NASA-CASE-XLA-03356] c10 N71-23315
Development and characteristics of electric circuitry for detecting electrical pulses rise time and amplitude
[NASA-CASE-IMP-08804] c09 N71-24717
Circuit for measuring wide range of pulse rates by utilizing high capacity counter
[NASA-CASE-IMP-06234] c10 N71-27137
Precision full wave rectifier circuit for rectifying incoming electrical signals having positive or negative polarity with only positive output signals
[NASA-CASE-ARC-10101-1] c09 N71-33109
Phase modulating with odd and even finite power series of a modulating signal
[NASA-CASE-LAB-11607-1] c32 N77-14292
- ELECTRIC RELAYS**
Spark gap type protective circuit for fast sensing and removal of overvoltage conditions
[NASA-CASE-XAC-08981] c09 N69-39897
Time division multiplexer with magnetic latching relays
[NASA-CASE-IMP-00431] c09 N70-38998
Alarm system design for monitoring one or more relay circuits
[NASA-CASE-INS-10984-1] c10 N71-19417
Time division relay synchronizer with master sync pulse for activating binary counter to produce signal identifying time slot for station
- [NASA-CASE-GSC-10373-1] c07 N71-19773
Relay circuit breaker with magnetic latching to provide conductive and nonconductive paths for current devices
[NASA-CASE-MSC-11277] c09 N71-29008
- ELECTRIC ROCKET ENGINES**
Electric rocket engine with electron bombardment ionization chamber
[NASA-CASE-IMP-04124] c28 N71-21822
- ELECTRIC SWITCHES**
Thermionic diode switch for use in high temperature region to chop current from dc source
[NASA-CASE-NPO-10404] c03 N71-12255
Characteristics of hermetically sealed electric switch with flexible operating capability
[NASA-CASE-IMP-09808] c09 N71-12518
Electrical switching device comprising conductive liquid confined within square loop of deformable nonconductive tubing also used for leveling
[NASA-CASE-NPO-10037] c09 N71-19610
System for checking status of several double-throw switches by readout indications
[NASA-CASE-XLA-08799] c10 N71-27272
Pulse generating circuit for operation at very high duty cycles and repetition rates
[NASA-CASE-IMP-00745] c10 N71-28960
High dc switch for causing abrupt, cyclic, decreases of current to operate under zero or varying gravity conditions
[NASA-CASE-LEW-10155-1] c09 N71-29035
Zero power telemetry actuated switch for biomedical equipment
[NASA-CASE-ARC-10105] c09 N72-17153
Development of differential pressure control system using motion of mechanical diaphragms to operate electric switch
[NASA-CASE-MFS-14216] c14 N73-13418
Dual mode solid state power switch
[NASA-CASE-MFS-22880-1] c33 N76-31410
Very narrow band width receiver
[NASA-CASE-GSC-12142-1] c32 N77-20299
- ELECTRIC TERMINALS**
Electrical connector pin with wiping action to assure reliable contact
[NASA-CASE-IMP-04238] c09 N69-39734
Patent data on terminal insert connector for flat electric cables
[NASA-CASE-IMP-00324] c09 N70-34596
Tool attachment for spreading or moving away loose elements from terminal posts during winding of filamentary elements
[NASA-CASE-IMP-02107] c15 N71-10809
Electrical spot terminal assembly for printed circuit boards
[NASA-CASE-NPO-10034] c15 N71-17685
Device for resistance soldering electrical leads to solder cups of multiple terminal block
[NASA-CASE-GSC-10913] c15 N72-22491
Development of electric connector and pin assembly with radio frequency absorbing sleeve to reduce radio frequency interference
[NASA-CASE-XLA-02609] c09 N72-25256
Device for configuring multiple leads --- method for connecting electric leads to printed circuit board
[NASA-CASE-MFS-22133-1] c33 N74-26977
- ELECTRIC WELDING**
Development of electric weeding torch with casing on one end to form inert gas shield
[NASA-CASE-IMP-02330] c15 N71-23798
Electric resistance spot welding and brazing for producing metal bonds with superior mechanical and structural characteristics
[NASA-CASE-LAB-11072-1] c15 N73-20535
Process for welding compressor and turbine blades to rotors and discs of jet engines
[NASA-CASE-LEW-10533-1] c15 N73-28515
- ELECTRIC WIRE**
Apparatus for forming wire grids for electric strain gages
[NASA-CASE-XLE-00023] c15 N70-33330
Control of fusion welding through use of thermocouple wire
[NASA-CASE-MFS-06074] c15 N71-20393
Ablation sensor for measuring char layer recession rate using electric wires
[NASA-CASE-XLA-01794] c33 N71-21586

- Device for resistance soldering electrical leads to solder cups of multiple terminal block
[NASA-CASE-GSC-10913] c15 N72-22491
- Lead attachment for high temperature operation of electronic devices
[NASA-CASE-ERC-10224] c09 N72-25261
- Means for accommodating large overstrain in lead wires --- by storing extra length of wire in stretchable loop
[NASA-CASE-LPR-10168-1] c33 N74-22865
- Device for configuring multiple leads --- method for connecting electric leads to printed circuit board
[NASA-CASE-MPS-22133-1] c33 N74-26977
- High current electrical lead --- for thermionic converters
[NASA-CASE-LEW-10950-1] c33 N74-27683
- ELECTRICAL ENGINEERING**
- Counter-divider circuit for accuracy and reliability in binary circuits
[NASA-CASE-XMF-00421] c09 N70-34502
- Vibrating element electrometer producing high conversion gain by input current control of elements resonant frequency displacement amplitude
[NASA-CASE-XAC-02807] c09 N71-23021
- ELECTRICAL FAULTS**
- Overcurrent protecting circuit for push-pull transistor amplifiers
[NASA-CASE-MSC-12033-1] c09 N71-13531
- Circuit design for failure sensing and protecting low voltage electric generator and power transmission networks
[NASA-CASE-GSC-10114-1] c10 N71-27366
- Test method and equipment for identifying faulty cells or connections in solar cell assemblies
[NASA-CASE-NFO-10401] c03 N72-20033
- Shared memory for a fault-tolerant computer
[NASA-CASE-NFO-13139-1] c60 N76-21914
- Hearing aid malfunction detection system
[NASA-CASE-MSC-14916-1] c33 N77-13335
- Cable fault locator
[NASA-CASE-KSC-10899-1] c33 N77-28394
- ELECTRICAL IMPEDANCE**
- High voltage transistor circuit
[NASA-CASE-XNP-06937] c09 N71-19516
- Development of electrical system for measuring high impedance
[NASA-CASE-XMS-08589-1] c09 N71-20569
- Signaling summary alarm circuit with semiconductor switch for faulty contact indications
[NASA-CASE-XLE-03061-1] c10 N71-24798
- Signal conditioning circuit apparatus --- with constant input impedance
[NASA-CASE-ARC-10348-1] c33 N75-19518
- Readout electrode assembly for measuring biological impedance
[NASA-CASE-ARC-10816-1] c35 N76-24525
- Solid-state current transformer
[NASA-CASE-MPS-22560-1] c33 N77-14335
- ELECTRICAL INSULATION**
- Water cooled solenoid capable of producing magnetic field intensities up to 100 kilogauss
[NASA-CASE-XNP-01951] c09 N70-41929
- Method and apparatus for removing plastic insulation from wire using cryogenic equipment
[NASA-CASE-MPS-10340] c15 N71-17628
- Nonconductive tube as feed system for plasma thruster
[NASA-CASE-XLE-02902] c25 N71-21694
- Internal labyrinth and shield structure to improve electrical isolation of propellant feed source from ion thruster
[NASA-CASE-LEW-10210-1] c28 N71-26781
- Development of process for forming insulating layer between two electrical conductor or semiconductor materials
[NASA-CASE-LEW-10489-1] c15 N72-25447
- Bio-isolated dc operational amplifier --- for bioelectric measurements
[NASA-CASE-ARC-10596-1] c33 N74-21851
- Stored charge transistor
[NASA-CASE-NFO-11156-2] c33 N75-31331
- Method of making an insulation foil
[NASA-CASE-LEW-11484-1] c24 N75-33181
- Method of electrically pre-stressing insulation to provide directional increase in dc potential breakdown
- [NASA-CASE-LEW-12273-1] c33 N77-17357
- ELECTRICAL MEASUREMENT**
- Capacitance measuring device for determining flare accuracy on tapered tubes
[NASA-CASE-XKS-03495] c14 N69-39785
- Bootstrap unloading circuits for sampling transducer voltage sources without drawing current
[NASA-CASE-XNP-09768] c09 N71-12516
- Micromicroampere current measuring circuit, with two subminiature thermionic diodes with filament cathodes
[NASA-CASE-XNP-00384] c09 N71-13530
- Low impedance apparatus for measuring electrostatic field intensity near space vehicles
[NASA-CASE-XLE-00820] c14 N71-16014
- Electric current measuring apparatus design including saturable core transformer and energy storage device to avoid magnetizing current errors from transformer output winding
[NASA-CASE-XGS-02439] c14 N71-19431
- High voltage divider system for attenuating high voltages to convenient levels suitable for introduction to measuring circuits
[NASA-CASE-XLE-02008] c09 N71-21583
- Ablation sensor for measuring char layer recession rate using electric wires
[NASA-CASE-XIA-01794] c33 N71-21586
- Current measurement by use of Hall effect generator
[NASA-CASE-XAC-01662] c14 N71-23037
- Connector internal force gage for measuring strength of electrical connection
[NASA-CASE-XNP-03918] c14 N71-23087
- Voltage range selection apparatus for sensing and applying voltages to electronic instruments without loading signal source
[NASA-CASE-XMS-06497] c14 N71-26244
- Lightning current measuring systems
[NASA-CASE-KSC-10807-1] c33 N75-26246
- Rapid activation and checkout device for batteries
[NASA-CASE-MPS-22749-1] c44 N76-14601
- Electrical conductivity cell and method for fabricating the same
[NASA-CASE-ARC-10810-1] c33 N76-19339
- Trielectrode capacitive pressure transducer
[NASA-CASE-ARC-10711-2] c33 N76-21390
- Readout electrode assembly for measuring biological impedance
[NASA-CASE-ARC-10816-1] c35 N76-24525
- ELECTRICAL PROPERTIES**
- Voltage drift compensation circuit for analog-to-digital converter
[NASA-CASE-XNP-04780] c08 N71-19687
- Development and characteristics of electronically resettable fuse with saturable core current sensing transformer having two outside legs and center leg
[NASA-CASE-XGS-11177] c09 N71-27001
- Development and characteristics of voltage regulator for connection in series with alternating current source and load using three leg, two-window transformer
[NASA-CASE-ERC-10113] c09 N71-27053
- Development of system with electrical properties which vary with changes in temperature for use with feedback loop in operational amplifier circuit
[NASA-CASE-MSC-13276-1] c14 N71-27058
- Electrically coupled individually encapsulated solar cell matrix
[NASA-CASE-NFO-11190] c03 N71-34044
- Storage battery comprising negative plates of a wedge shaped configuration --- for preventing shape change induced malfunctions
[NASA-CASE-NFO-11806-1] c44 N74-19693
- Thermocouple tape --- developed from thermoelectrically different metals
[NASA-CASE-LEW-11072-2] c35 N76-15434
- ELECTRICAL RESISTANCE**
- Development of electrical system for indicating optimum contact between electrode and metal surface to permit improved soldering operation
[NASA-CASE-KSC-10242] c15 N72-23497
- Radio frequency source resistance measuring instruments of varied design
[NASA-CASE-NFO-11291-1] c14 N73-30388

ELECTRICAL RESISTIVITY

Describing method for vapor deposition of gallium arsenide films to manganese substrates to provide semiconductor devices with low resistance substrates
[NASA-CASE-XNP-01328] c26 N71-18064

Simulating operation of thermopile vacuum gage tube at high and low pressures
[NASA-CASE-XLA-02758] c14 N71-18481

Electrically conductive fluorocarbon polymers
[NASA-CASE-XLE-06774-2] c06 N72-25150

Lightweight electrically powered flexible thermal laminate --- made of metal fibers
[NASA-CASE-MSC-12662-1] c24 N75-16635

Electrical conductivity cell and method for fabricating the same
[NASA-CASE-ARC-10810-1] c33 N76-19339

ELECTRICITY

Thermionic converter for converting heat energy directly into electrical energy
[NASA-CASE-XLE-01903] c22 N71-23599

ELECTRO-OPTICS

Electro-optical system with scan-in illuminator and scan-out photosensor for scanning variable transmittance objects
[NASA-CASE-NPO-11106] c14 N70-34697

Electro-optical system for maintaining two-axis alignment during milling operations on large tank-sections
[NASA-CASE-XNP-00908] c14 N70-40238

Automatic polarimeter capable of measuring transient birefringence changes in electro-optic materials
[NASA-CASE-XNP-08883] c23 N71-16101

Design and development of light sensing device for controlling orientation of object relative to sun or other light source
[NASA-CASE-NPO-11201] c14 N72-27409

Electro-optical stabilization of calibrated light source
[NASA-CASE-MSC-12293-1] c14 N72-27411

Optical conversion method
[NASA-CASE-MSC-12618-1] c74 N76-18917

ELECTROACOUSTIC TRANSDUCERS

Transducer for monitoring oxygen flow in respirator
[NASA-CASE-FRC-10012] c14 N72-17329

Material suspension within an acoustically excited resonant chamber --- at near weightless conditions
[NASA-CASE-NPO-13263-1] c12 N75-24774

ELECTROACOUSTIC WAVES

Phonocardiogram simulator producing electrical voltage waves to control amplitude and duration between simulated sounds
[NASA-CASE-XKS-10804] c05 N71-24606

ELECTROCARDIOGRAPHY

Phonocardiogram simulator producing electrical voltage waves to control amplitude and duration between simulated sounds
[NASA-CASE-XKS-10804] c05 N71-24606

Development of instantaneous reading tachometer for measuring electrocardiogram signal rate
[NASA-CASE-MFS-20418] c14 N73-24473

Insulated electrocardiographic electrodes --- without paste electrolyte
[NASA-CASE-MSC-14339-1] c05 N75-24716

EKG and ultrasonoscope display
[NASA-CASE-ARC-10994-2] c52 N77-15619

ELECTROCHEMICAL CELLS

Apparatus for measuring polymer membrane expansion in electrochemical cells
[NASA-CASE-XGS-03865] c14 N69-21363

Preventing pressure buildup in electrochemical cells by reacting palladium oxide with evolved hydrogen
[NASA-CASE-XGS-01419] c03 N70-41864

Nonmagnetic hermetically sealed battery case made of epoxy resin and woven glass tape for use with electrochemical cells in spacecraft
[NASA-CASE-XGS-00886] c03 N71-11053

Epoxy resin sealing device for electrochemical cells in high vacuum environments
[NASA-CASE-XGS-02630] c03 N71-22974

Sealed electrochemical cell with flexible casing for varying electrolyte level in cell
[NASA-CASE-XGS-01513] c03 N71-23336

Elimination of two step voltage discharge property of silver zinc batteries by using

divalent silver oxide capacity of cell to charge anodes to monovalent silver state
[NASA-CASE-XGS-01674] c03 N71-29129

Flexible, frangible electrochemical cell and package for operation in low temperature environment
[NASA-CASE-XGS-10010] c03 N72-15986

Porous electrode for use in electrochemical cells
[NASA-CASE-GSC-11368-1] c09 N73-32108

Battery testing device --- for testing cells of multiple-cell battery
[NASA-CASE-MFS-20761-1] c44 N74-27519

Electrical conductivity cell and method for fabricating the same
[NASA-CASE-ARC-10810-1] c33 N76-19339

Device for the detection of phenol and related compounds --- in an electrochemical cell
[NASA-CASE-LEW-12513-1] c25 N77-18238

ELECTROCHEMICAL OXIDATION

Device for the detection of phenol and related compounds --- in an electrochemical cell
[NASA-CASE-LEW-12513-1] c25 N77-18238

ELECTROCHEMISTRY

Electrochemically reversible silver-silver chloride electrode for detecting bioelectric potential differences generated by human muscles and organs
[NASA-CASE-XMS-02872] c05 N69-21925

ELECTRODE FILM BARRIERS

Formulated plastic separators for soluble electrode cells --- rubber-ion transport sheeting
[NASA-CASE-LIW-12358-1] c44 N77-18560

ELECTRODEPOSITION

Binding layer of semiconductor particles by electrodeposition
[NASA-CASE-XNP-01959] c26 N71-23043

Electrodeposition method for producing crystalline material from dense gaseous medium
[NASA-CASE-NPO-10440] c15 N72-21466

Electrophoretic sample insertion --- device for uniformly distributing samples in flow path
[NASA-CASE-MFS-21395-1] c25 N74-26948

Multitarget sequential sputtering apparatus
[NASA-CASE-NPO-13345-1] c37 N75-19684

Device for the detection of phenol and related compounds --- in an electrochemical cell
[NASA-CASE-LEW-12513-1] c25 N77-18238

ELECTRODES

Hollow spherical electrode for shielding dielectric junction between high voltage conductor and insulator
[NASA-CASE-XLE-03778] c09 N69-21542

Electrochemically reversible silver-silver chloride electrode for detecting bioelectric potential differences generated by human muscles and organs
[NASA-CASE-XMS-02872] c05 N69-21925

Bonding method for improving contact between lead telluride thermoelectric elements and tungsten electrodes
[NASA-CASE-XGS-04554] c15 N69-39786

Ionization vacuum gage
[NASA-CASE-XNP-00646] c14 N70-35666

Accel and focus electrode design for ion engine with improved efficiency
[NASA-CASE-XNP-02839] c28 N70-41922

Including didymium hydrate in nickel hydroxide of positive electrode of storage batteries to increase ampere hour capacity
[NASA-CASE-XGS-03505] c03 N71-10608

Apertured electrode focusing system for ion sources with nonuniform plasma density
[NASA-CASE-XNP-03332] c09 N71-10618

Electromedical garment, applying vectorcardiologic type electrodes to human torsos for data recording during physical activity
[NASA-CASE-XFR-10856] c05 N71-11189

Electrode attached to helmets for detecting low level signals from skin of living creatures
[NASA-CASE-ARC-10043-1] c05 N71-11193

Characteristics of pressed disc electrode for biological measurements
[NASA-CASE-XMS-04212-1] c05 N71-12346

Electrode connection for n-on-p silicon solar cell
[NASA-CASE-XLE-04787] c03 N71-20492

Arc electrode of graphite with tantalum ball tip
[NASA-CASE-XLE-04788] c09 N71-22987

- Electrode sealing and insulation for fuel cells containing caustic liquid electrolytes using powdered plastic and metal
[NASA-CASE-XMS-01625] c15 N71-23022
- Automatic recording McLeod gage with three electrodes and solenoid valve connection
[NASA-CASE-XLE-03280] c14 N71-23093
- Dry electrode design with wire sandwiched between two flexible conductive discs for monitoring physiological responses
[NASA-CASE-FRC-10029] c09 N71-24618
- Development and characteristics of electrodes in which poisoning by organic molecules is prevented by ion selective electrolytic deposition of hydrophilic protein colloid
[NASA-CASE-XMS-04213-1] c09 N71-26002
- Adhesive spray process for attaching biomedical skin electrodes
[NASA-CASE-XFR-07658-1] c05 N71-26293
- Electrodes having array of small surfaces for field ionization
[NASA-CASE-ERC-10013] c09 N71-26678
- Manufacturing process for making perspiration resistant-stress resistant biopotential electrode
[NASA-CASE-MSC-90153-2] c05 N72-25120
- Dry electrode manufacture, using silver powder with cement
[NASA-CASE-FRC-10029-2] c05 N72-25121
- Compressible electrolyte saturated sponge electrode for biomedical applications
[NASA-CASE-MSC-13648] c05 N72-27103
- Electrode with multiple columnar conductors for limiting field emission current
[NASA-CASE-ERC-10015-2] c10 N72-27246
- Coaxial, high density, hypervelocity plasma generator and accelerator using electrodes
[NASA-CASE-MFS-20589] c25 N72-32688
- Characteristics of ion rocket engine with combination keeper electrode and electron baffle
[NASA-CASE-NPO-11880] c28 N73-24783
- Silicon carbide backward diode with coated lead attachment
[NASA-CASE-ERC-10224-2] c09 N73-27150
- Porous electrode for use in electrochemical cells
[NASA-CASE-GSC-11368-1] c09 N73-32108
- High powered arc electrodes --- producing solar simulator radiation
[NASA-CASE-LFW-11162-1] c33 N74-12913
- Method of making porous conductive supports for electrodes --- by electroforming and stacking nickel foils
[NASA-CASE-GSC-11367-1] c44 N74-19692
- Insulated electrocardiographic electrodes --- without paste electrolyte
[NASA-CASE-MSC-14339-1] c05 N75-24716
- Readout electrode assembly for measuring biological impedance
[NASA-CASE-ARC-10816-1] c35 N76-24525
- Gels as battery separators for soluble electrode cells
[NASA-CASE-LFW-12364-1] c44 N77-22606
- Snap-in compressible biomedical electrode
[NASA-CASE-MSC-14623-1] c52 N77-28717
- ELECTROFORMING**
Method of electroforming a rocket chamber
[NASA-CASE-LFW-11118-1] c20 N74-32919
- ELECTROHYDRAULIC FORMING**
Electric discharge apparatus for electrohydraulic explosive forming
[NASA-CASE-XMF-00375] c15 N70-34249
- ELECTROHYDRODYNAMICS**
Control valve for switching main stream of fluid from one stable position to another by means of electrohydrodynamic forces
[NASA-CASE-NPO-10416] c12 N71-27332
- ELECTROKINETICS**
Zeta potential flowmeter for measuring very slow to very high flows
[NASA-CASE-XNP-06509] c14 N71-23226
- ELECTROLYSIS**
Water electrolysis rocket engine with self-regulating stoichiometric fuel mixing regulator
[NASA-CASE-XGS-08729] c28 N71-14044
- Operation method for combined electrolysis device and fuel cell using molten salt to produce power by thermoelectric regeneration mechanism
[NASA-CASE-XLE-01645] c03 N71-20904
- ELECTROLYTES**
Apparatus for measuring polymer membrane expansion in electrochemical cells
[NASA-CASE-XGS-03865] c14 N69-21363
- Electrolytically regenerative hydrogen-oxygen fuel cells
[NASA-CASE-XLE-04526] c03 N71-11052
- Sealed electrochemical cell with flexible casing for varying electrolyte level in cell
[NASA-CASE-XGS-01513] c03 N71-24336
- Compressible electrolyte saturated sponge electrode for biomedical applications
[NASA-CASE-MSC-13648] c05 N72-27103
- ELECTROLYTIC CELLS**
Heat activated cell with aluminum anode
[NASA-CASE-LEW-11359-2] c03 N72-20034
- Actuator operated by electrolytic drive gas generator and evacuator
[NASA-CASE-NPO-11369] c15 N73-13467
- Electrolytic cell structure
[NASA-CASE-LAR-11042-1] c33 N75-27252
- Reconstituted asbestos matrix --- for use in fuel or electrolysis cells
[NASA-CASE-MSC-12568-1] c24 N76-14204
- Multi-cell battery protection system
[NASA-CASE-LEW-12039-1] c44 N76-23713
- Polymeric electrolytic hygrometer
[NASA-CASE-NPO-13948-1] c35 N77-28470
- ELECTROMAGNETIC ABSORPTION**
Optical imaging system for increasing light absorption efficiency of imaging detector
[NASA-CASE-ARC-10194-1] c23 N73-20741
- Method and apparatus for background signal reduction in opto-acoustic absorption measurement
[NASA-CASE-NFO-13683-1] c35 N77-14411
- ELECTROMAGNETIC FIELDS**
Tumbling motion system for object demagnetization
[NASA-CASE-XGS-02437] c15 N69-21472
- Device for high vacuum film deposition with electromagnetic ion steering
[NASA-CASE-NPO-10331] c09 N71-26701
- Metal detection system with electromagnetic transmitter with single coil and receiver with single coil
[NASA-CASE-ARC-10265-1] c10 N72-28240
- Low power electromagnetic flowmeter system producing zero output signal for zero flow
[NASA-CASE-ARC-10362-1] c14 N73-32326
- Electromagnetic flow rate meter --- for liquid metals
[NASA-CASE-LEW-10981-1] c35 N74-21018
- ELECTROMAGNETIC HAMMERS**
Method and apparatus for shaping and joining large diameter metal tubes using magnetomotive forces
[NASA-CASE-XMF-05114] c15 N71-17650
- Portable magnetomotive hammer for metal working
[NASA-CASE-XMF-03793] c15 N71-24833
- ELECTROMAGNETIC INTERFERENCE**
Sealed housing for protecting electronic equipment against electromagnetic interference
[NASA-CASE-MSC-12168-1] c09 N71-18600
- Method of treating the surface of a glass member
[NASA-CASE-GSC-12110-1] c27 N77-32308
- ELECTROMAGNETIC MEASUREMENT**
Apparatus for measuring backscatter and transmission characteristics of sample segment of large spherical passive satellites
[NASA-CASE-XGS-02608] c07 N70-41678
- Microcomputerized electric field meter diagnostic and calibration system
[NASA-CASE-KSC-11035-1] c33 N77-20343
- ELECTROMAGNETIC NOISE**
Development of idler feedback system to reduce electronic noise problem in two parametric amplifiers
[NASA-CASE-LAR-10253-1] c09 N72-25258
- Audio equipment for removing impulse noise from audio signals
[NASA-CASE-NFO-11631] c10 N73-12244
- Filtering device --- removing electromagnetic noise from voice communication signals
[NASA-CASE-MFS-22729-1] c32 N76-21366
- ELECTROMAGNETIC PUMPS**
Multiducted electromagnetic pump for conductive liquids
[NASA-CASE-NPO-10755] c15 N71-27084

SUBJECT INDEX

ELECTRON FLUX DENSITY

ELECTROMAGNETIC RADIATION

Inflatable radar reflector unit - lightweight, highly reflective to electromagnetic radiation, and adaptable for erection and deployment with minimum effort and time
[NASA-CASE-XMS-00893] c07 N70-40063

Development of electromagnetic wave transmission line circulator and application to parametric amplifier circuits
[NASA-CASE-XNP-02140] c09 N71-23097

Left and right hand circular electromagnetic polarization excitation by phase shifter and hybrid networks
[NASA-CASE-GSC-10021-1] c09 N71-24595

Development of method for suppressing excitation of electromagnetic surface waves on dielectric converter antenna
[NASA-CASE-XLA-10772] c07 N71-28980

Characteristics of microwave antenna with conical reflectors to generate plane wave front
[NASA-CASE-NPO-11661] c07 N73-14130

Method and apparatus for measuring electromagnetic radiation
[NASA-CASE-LEW-11159-1] c14 N73-28488

Nonequilibrium radiation nuclear reactor
[NASA-CASE-HCN-10841-1] c73 N75-22108

ELECTROMAGNETIC SHIELDING

Shielded flat conductor cable fabricated by electroless and electrolytic plating
[NASA-CASE-MPS-13687] c09 N71-28691

ELECTROMAGNETIC WAVE FILTERS

Design and characteristics of laser camera system with diffusion filter of small particles with average diameter larger than wavelength of laser light
[NASA-CASE-NPO-10417] c16 N71-33410

ELECTROMAGNETIC WAVE TRANSMISSION

Apparatus for measuring backscatter and transmission characteristics of sample segment of large spherical passive satellites
[NASA-CASE-XGS-02608] c07 N70-41678

ELECTROMAGNETISM

Electromagnetic braking arrangement for controlling rotor rotation in electric motor
[NASA-CASE-XNP-06936] c15 N71-24695

ELECTROMAGNETS

Oscillatory electromagnetic mirror drive system for horizon scanners
[NASA-CASE-XLA-03724] c14 N69-27461

Water cooled solenoid capable of producing magnetic field intensities up to 100 kilogauss
[NASA-CASE-XNP-01951] c09 N70-41929

Magnetic element position sensing device, using misaligned electromagnets
[NASA-CASE-XGS-07514] c23 N71-16099

Electroexplosive safe-arm initiator using electric driven electromagnetic coils and magnets to align charge
[NASA-CASE-LAR-10372] c09 N71-18599

Magnetic bearing --- for supplying magnetic fluxes
[NASA-CASE-GSC-11079-1] c37 N75-18574

ELECTROMECHANICAL DEVICES

Electromechanical actuator and its use in rocket thrust control valve
[NASA-CASE-XNP-05975] c15 N69-23185

Power controlled bimetallic electromechanical actuator for accurate, timely, and reliable response to remote control signal
[NASA-CASE-XNP-09776] c09 N69-39929

Electro-mechanical circuit for converting floating intelligence signal to common electrically grounded intelligence recorder
[NASA-CASE-XAC-00086] c09 N70-33182

Describing device for velocity control of electromechanical drive mechanism of scanning mirror of interferometer
[NASA-CASE-XGS-03532] c14 N71-17627

Mechanical actuator wherein linear motion changes to rotational motion
[NASA-CASE-XGS-04548] c15 N71-24045

Solid state force measuring electromechanical transducers made of piezoresistive materials
[NASA-CASE-ERC-10088] c26 N71-25490

Electromechanical control actuator system using double differential screws
[NASA-CASE-ERC-10022] c15 N71-26635

Miniature electromechanical junction transducer operating on piezoelectric effect and utilizing epoxy for stress coupling component

[NASA-CASE-ERC-10087] c14 N71-27334

Service life of electromechanical device for generating sine/cosine functions
[NASA-CASE-LAR-10503-1] c09 N72-21248

Electromechanical actuator for producing mechanical force and/or motion in response to electrical signals
[NASA-CASE-NFO-11738-1] c09 N73-30185

A rotary electric device
[NASA-CASE-GSC-12138-1] c33 N77-26344

Electro-mechanical sine/cosine generator
[NASA-CASE-LAR-11389-1] c33 N77-26387

ELECTROMETERS

Vibrating element electrometer producing high conversion gain by input current control of elements resonant frequency displacement amplitude
[NASA-CASE-XAC-02807] c09 N71-23021

ELECTROMOTIVE FORCES

Heat activated emf cells with aluminum anode
[NASA-CASE-LEW-11359] c03 N71-28579

ELECTRON BEAM WELDING

Portable electron beam welding chamber
[NASA-CASE-LEW-11531] c15 N71-14932

Development of device to prevent high voltage arcing in electron beam welding
[NASA-CASE-XMP-08522] c15 N71-19486

ELECTRON BEAMS

Using electron beam switching for brushless motor commutation
[NASA-CASE-XGS-01451] c09 N71-10677

Electron beam scanning system for improved image definition and reduced power requirements for video signal transmission
[NASA-CASE-ERC-10552] c09 N71-12539

Electron beam deflection devices for measuring electric fields
[NASA-CASE-XNP-10289] c14 N71-23692

Apparatus to determine electric field strength by measuring deflection of electron beam impinging on target
[NASA-CASE-XMP-06617] c09 N71-24843

Characteristics of infrared photodetectors manufactured from semiconductor material irradiated by electron beam
[NASA-CASE-LAR-10728-1] c14 N73-12445

Electron beam controller --- using magnetic field to refocus spent electron beam in microwave oscillator tube
[NASA-CASE-LEW-11617-1] c33 N74-10195

Image tube --- deriving electron beam replica of image
[NASA-CASE-GSC-11602-1] c33 N74-21850

Very high intensity light source using a cathode ray tube --- electron beams
[NASA-CASE-XNP-01296] c33 N75-27250

ELECTRON BOMBARDMENT

Improved cathode containing barium carbonate block and heated tungsten screen for electron bombardment ion thruster
[NASA-CASE-XIP-07087] c06 N69-39889

Device and method for particle bombardment of specimens in electron microscope and measurement of beam intensities
[NASA-CASE-XGS-01725] c14 N69-39982

Electric rocket engine with electron bombardment ionization chamber
[NASA-CASE-XNP-04124] c28 N71-21822

Electronic cathodes for use in electron bombardment ion thrusters
[NASA-CASE-XLE-04501] c09 N71-23190

Single grid accelerator system for electron bombardment type ion thruster
[NASA-CASE-XLE-10453-2] c28 N73-27699

ELECTRON DISTRIBUTION

Measurement of plasma temperature and density using radiation absorption
[NASA-CASE-ARC-10598-1] c75 N74-30156

ELECTRON EMISSION

Vacuum thermionic converter with short-circuited triodes and increased electron transmission and conversion efficiency
[NASA-CASE-XLE-01015] c03 N69-39898

ELECTRON FLUX DENSITY

Device and method for particle bombardment of specimens in electron microscope and measurement of beam intensities
[NASA-CASE-XGS-01725] c14 N69-39982

ELECTRON IRRADIATION

SUBJECT INDEX

ELECTRON IRRADIATION

- Electrostatic ion engines using high velocity electrons to ionize propellant
[NASA-CASE-XLE-00376] c28 N70-37245
- ELECTRON MICROSCOPES**
Device and method for particle bombardment of specimens in electron microscope and measurement of beam intensities
[NASA-CASE-IGS-01725] c14 N69-39982
Method of forming aperture plate for electron microscope
[NASA-CASE-ARC-10448-2] c74 N75-12732
Electron microscope aperture system
[NASA-CASE-ARC-10448-3] c35 N77-14408
- ELECTRON PHOTON CASCADES**
Resistive anode image converter
[NASA-CASE-HQN-1C876-1] c33 N76-27473
- ELECTRON PLASMA**
Apparatus for producing highly conductive, high temperature electron plasma with homogeneous temperature and pressure distribution
[NASA-CASE-XLA-00147] c25 N70-34661
- ELECTRON SOURCES**
Electron microscope aperture system
[NASA-CASE-ARC-10448-3] c35 N77-14408
- ELECTRON TRANSFER**
Method for treating metal surfaces to prevent secondary electron transmission
[NASA-CASE-INP-09469] c24 N71-25555
- ELECTRON TRANSITIONS**
Diatomic infrared gasdynamic laser --- for producing different wavelengths
[NASA-CASE-ARC-10370-1] c36 N75-31426
- ELECTRON TUBES**
Direct radiation cooling of linear beam collector tubes
[NASA-CASE-INP-09227] c15 N69-24319
Refractory filament series circuitry for radiant heater
[NASA-CASE-XLE-00387] c33 N70-34812
- ELECTRON TUNNELING**
Doped Josephson tunneling junction for use in a sensitive IR detector
[NASA-CASE-NFO-13348-1] c33 N75-31332
- ELECTRONIC CONTROL**
Electronic and mechanical scanning control system for monopulse tracking antenna
[NASA-CASE-XGS-05582] c07 N69-27460
Electronic circuit system for controlling electric motor speed
[NASA-CASE-INP-01129] c09 N70-38712
Scanning signal phase and amplitude electronic control device with hybrid T waveguide junction
[NASA-CASE-NFO-10302] c10 N71-26142
Ion beam deflector system for electronic thrust vector control for ion propulsion yaw, pitch, and roll forces
[NASA-CASE-LEW-10689-1] c28 N71-26173
Electronic detection system for peak acceleration limits in vibrational testing of spacecraft components
[NASA-CASE-NPO-10556] c14 N71-27185
Control and information system for digital telemetry data using analog converter to digitize sensed parameter values
[NASA-CASE-NPO-11016] c08 N72-31226
- ELECTRONIC EQUIPMENT**
Electronic and mechanical scanning control system for monopulse tracking antenna
[NASA-CASE-XGS-05582] c07 N69-27460
Development of pulse-activated polarographic hydrogen detector
[NASA-CASE-INP-06531] c14 N71-17575
Development of stable electronic amplifier adaptable for monolithic and thin film construction
[NASA-CASE-XGS-02812] c09 N71-19466
Development and characteristics of oscillating static inverter
[NASA-CASE-XGS-05289] c09 N71-19470
Development of electromagnetic wave transmission line circulator and application to parametric amplifier circuits
[NASA-CASE-INP-02140] c09 N71-23097
Development of optimum pre-detection diversity combining receiving system adapted for use with amplitude modulation, phase modulation, and frequency modulation systems
[NASA-CASE-XGS-00740] c07 N71-23098
- Electronic cathodes for use in electron bombardment ion thrusters
[NASA-CASE-XLE-04501] c09 N71-23190
Method and apparatus for adjusting thermal conductance in electronic components for space use
[NASA-CASE-INP-05524] c33 N71-24876
Development and characteristics of solid state acoustic variable time delay line using direct current voltage and radio frequency pulses
[NASA-CASE-ERC-10032] c10 N71-25900
Voltage range selection apparatus for sensing and applying voltages to electronic instruments without loading signal source
[NASA-CASE-XMS-06497] c14 N71-26244
Digital sensor for counting fringes produced by interferometers with improved sensitivity and one photomultiplier tube to eliminate alignment problem
[NASA-CASE-LAR-10204] c14 N71-27215
Device for rapid adjustment and maintenance of temperature in electronic components
[NASA-CASE-INP-02792] c14 N71-28958
Apparatus with summing network for compression of analog data by decreasing slope threshold sampling
[NASA-CASE-NPO-10769] c08 N72-11171
Readily assembled universal environment housing for electronic equipment
[NASA-CASE-KSC-10031] c15 N72-22486
Lead attachment for high temperature operation of electronic devices
[NASA-CASE-ERC-10224] c09 N72-25261
Development of method and apparatus for detecting surface ions on silicon diodes and transistors
[NASA-CASE-ERC-10325] c15 N72-25457
Development and characteristics of data decoder to process convolution encoded information
[NASA-CASE-NFO-11371] c08 N73-12177
Characteristics of digital data processor using pulse from clock source to derive binary singles to show state of various indicators in processor
[NASA-CASE-GSC-10975-1] c08 N73-13187
Development and characteristics for automatically displaying digits in any desired order using optical techniques
[NASA-CASE-XMS-00348] c09 N73-14215
Thermochromic compositions for detecting heat levels in electronic circuits and devices
[NASA-CASE-NFO-10764-1] c14 N73-14428
Development of phase control coupling for use with phased array antenna
[NASA-CASE-ERC-10285] c10 N73-16206
Device for locating electrically nonlinear objects and determining distance to object by FM signal transmission
[NASA-CASE-KSC-10108] c14 N73-25461
Electronic strain level counter on in-flight aircraft
[NASA-CASE-LAR-10756-1] c32 N73-26910
Automatic vehicle location system
[NASA-CASE-NFO-11850-1] c32 N74-12912
Automatic focus control for facsimile cameras
[NASA-CASE-LAR-11213-1] c35 N75-15014
Electronic analog divider
[NASA-CASE-LEW-11881-1] c33 N77-17354
- ELECTRONIC EQUIPMENT TESTS**
Apparatus for automatically testing analog to digital converters for open and short circuits
[NASA-CASE-XLA-06713] c14 N71-28991
Signal conditioner test set
[NASA-CASE-KSC-10750-1] c35 N75-12270
- ELECTRONIC FILTERS**
Self-tuning electronic filter for maintaining constant bandwidth and center frequency gain
[NASA-CASE-ARC-10264-1] c09 N73-20231
Capacitance multiplier and filter synthesizing network
[NASA-CASE-NPO-11948-1] c33 N74-32712
Notch filter
[NASA-CASE-NFS-23303-1] c32 N77-18307
- ELECTRONIC MODULES**
Thermal conductive, electrically insulated cleavable adhesive connection between electronic module and heat sink
[NASA-CASE-XMS-02087] c09 N70-41717

- Fabrication methods for matrices of solar cell submodules
[NASA-CASE-XMP-05821] c03 N71-11056
- Development and characteristics of cooling system to maintain temperature of rack mounted electronic modules
[NASA-CASE-MSC-12389] c33 N71-29052
- Tool for use in lifting pin supported objects
[NASA-CASE-NPO-13157-1] c37 N74-32918
- Phase substitution of spare converter for a failed one of parallel phase staggered converters
[NASA-CASE-NPO-13812-1] c33 N77-30365
- ELECTRONIC PACKAGING**
- Electrical feedthrough connection for printed circuit boards
[NASA-CASE-XMP-01483] c14 N69-27431
- Capacitor fabrication by solidifying mixture of ferromagnetic metal particles, nonferromagnetic particles, and dielectric material
[NASA-CASE-LEW-10364-1] c09 N71-13522
- Method of evaluating moisture barrier properties of materials used in electronics encapsulation
[NASA-CASE-NPO-10051] c18 N71-24934
- Electrical connections for thin film hybrid microcircuits
[NASA-CASE-XMS-02182] c10 N71-28783
- Flexible, frangible electrochemical cell and package for operation in low temperature environment
[NASA-CASE-XGS-10010] c03 N72-15986
- Development and characteristics of hermetically sealed coaxial package for containing microwave semiconductor components
[NASA-CASE-GSC-10791-1] c15 N73-14469
- Techniques for packaging and mounting printed circuit boards
[NASA-CASE-MFS-21919-1] c10 N73-25243
- Integrated circuit package with lead structure and method of preparing the same
[NASA-CASE-MFS-21374-1] c33 N74-12951
- Tool for use in lifting pin supported objects
[NASA-CASE-NPO-13157-1] c37 N74-32918
- ELECTRONIC RECORDING SYSTEMS**
- Electronic recording system for spatial mass distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
[NASA-CASE-NPO-10185] c10 N71-26339
- ELECTRONIC TRANSDUCERS**
- Fiber optic transducers for monitoring and analysis of vibration in aerospace vehicles and onboard equipment
[NASA-CASE-XMP-02433] c14 N71-10616
- Transducer circuit design with single coaxial cable for input and output connections including incorporation into miniaturized catheter transducer
[NASA-CASE-ARC-10132-1] c09 N71-24597
- Circuit design for failure sensing and protecting low voltage electric generator and power transmission networks
[NASA-CASE-GSC-10114-1] c10 N71-27366
- Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-2(B)] c33 N74-14941
- Electromagnetic transducer recording head having a laminated core section and tapered gap
[NASA-CASE-NPO-10711-1] c35 N77-21392
- ELECTROPHORESIS**
- Electrophoretic sample insertion --- device for uniformly distributing samples in flow path
[NASA-CASE-MFS-21395-1] c25 N74-26948
- Apparatus for conducting flow electrophoresis in the substantial absence of gravity
[NASA-CASE-MFS-21394-1] c34 N74-27744
- Automatic multiple-sample applicator and electrophoresis apparatus
[NASA-CASE-ARC-10991-1] c25 N77-12157
- ELECTROPHOTOMETERS**
- Method and photodetector device for locating abnormal voids in low density materials
[NASA-CASE-MFS-20044] c14 N71-28993
- ELECTROPHYSIOLOGY**
- Dry electrode design with wire sandwiched between two flexible conductive discs for monitoring physiological responses
[NASA-CASE-FRC-10029] c09 N71-24618
- ELECTROPLATING**
- Method of plating copper on aluminum to permit conventional soldering of structural aluminum bodies
[NASA-CASE-XLA-08966-1] c17 N71-25903
- Shielded flat conductor cable fabricated by electroless and electrolytic plating
[NASA-CASE-MFS-13687] c09 N71-28691
- Technique and equipment for sputtering using apertured electrode and pulsed substrate bias
[NASA-CASE-LEW-10920-1] c17 N73-24569
- ELECTROSTATIC CHARGE**
- Charged particle analyzer with periodically varying voltage applied across electrostatic deflection members
[NASA-CASE-IAC-05506-1] c24 N71-16095
- Electrostatic measurement system --- for contact-electrifying a dielectric
[NASA-CASE-MFS-22129-1] c33 N75-18477
- Internal combustion engine with electrostatic discharging fuels
[NASA-CASE-NPO-13798-1] c37 N77-25535
- ELECTROSTATIC ENGINES**
- Colloidal particle generator for electrostatic engine for propelling space vehicles
[NASA-CASE-XLE-00817] c28 N70-33265
- Encapsulated heater forming hollow body for cathode used in ion thruster
[NASA-CASE-LEW-10814-1] c28 N70-35422
- Electrostatic ion engines using high velocity electrons to ionize propellant
[NASA-CASE-XLE-00376] c28 N70-37245
- Electron bombardment ion rocket engine with improved propellant introduction system
[NASA-CASE-XLE-02066] c28 N71-15661
- ELECTROSTATIC GENERATORS**
- Electrostatic modulator for communicating through plasma sheath formed around spacecraft during reentry
[NASA-CASE-XLA-01400] c07 N70-41331
- ELECTROSTATIC PRECIPITATORS**
- Fine particulate capture device
[NASA-CASE-LEW-11583-1] c37 N74-13199
- Zero gravity separator
[NASA-CASE-LAR-10344-1] c35 N76-33470
- ELECTROSTATIC PROBES**
- Low impedance apparatus for measuring electrostatic field intensity near space vehicles
[NASA-CASE-XLE-00820] c14 N71-16014
- ELECTROSTATIC PROPULSION**
- Nuclear electric generator for accelerating charged propellant particles in electrostatic propulsion system
[NASA-CASE-XLE-00818] c22 N70-34248
- High voltage insulators for direct current in acceleration system of electrostatic thruster
[NASA-CASE-XLE-01902] c28 N71-10574
- Electrostatic microthrust propulsion system with annular slit colloid thruster
[NASA-CASE-GSC-10709-1] c28 N71-25213
- ELECTROSTATIC SHIELDING**
- Ion beam thruster shield
[NASA-CASE-LEW-12082-1] c20 N77-10148
- Shielded conductor cable system
[NASA-CASE-MSC-12745-1] c33 N77-13338
- ELECTROSTATICS**
- Controllable high voltage source having fast settling time
[NASA-CASE-GSC-11844-1] c33 N75-19522
- Durable antistatic coating for polymethylmethacrylate
[NASA-CASE-NPO-13867-1] c27 N77-22257
- ELECTROTHERMAL ENGINES**
- Electrothermal rocket engine using resistance heated heat exchanger
[NASA-CASE-XLE-00267] c28 N70-33356
- High resistance cross flow heat exchangers for electrothermal rocket engines
[NASA-CASE-XLE-01783] c28 N70-34175
- ELEVATION**
- Tracking mount for laser telescope employed in tracking large rockets and space vehicles to give information regarding azimuth and elevation
[NASA-CASE-MFS-14017] c14 N71-26627
- Automatic braking device for rapidly transferring humans or materials from elevated location
[NASA-CASE-IKS-07814] c15 N71-27067

ELEVATORS (LIFTS)

Centrifuge mounted motion simulator with elevator mechanism
[NASA-CASE-XAC-00399] c11 N70-34815
Guide member for stabilizing cable of open shaft elevator
[NASA-CASE-KSC-10513] c15 N72-25453

ELEVONS

Supersonic or hypersonic vehicle control system comprising elevons with hinge line sweep and free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088

ELLIPSES

Ellipsograph for describing and cutting ellipses with minimal axial dimensions
[NASA-CASE-XLA-03102] c14 N71-21079

ELONGATION

Strain gage measurement of elongation due to thermally and mechanically induced stresses
[NASA-CASE-XGS-04478] c14 N71-24233
Amplifying ribbon extensometer
[NASA-CASE-LAR-11825-1] c35 N77-22449

ELUTION

Amino acid analysis
[NASA-CASE-NFO-12130-1] c25 N75-14844

EMERGENCIES

Silent alarm system for multiple room facility or school
[NASA-CASE-NPO-11307-1] c10 N73-30205

EMERGENCY BREATHING TECHNIQUES

Pulmonary resuscitation method and apparatus with adjustable pressure regulator
[NASA-CASE-XMS-01115] c05 N70-39922

EMERGENCY LIFE SUSTAINING SYSTEMS

Development and characteristics of inflatable structure to provide escape from orbit for spacecrews under emergency conditions
[NASA-CASE-XMS-06162] c31 N71-28851
Three transceiver lunar emergency system to relay voice communication of astronaut
[NASA-CASE-MFS-21042] c07 N72-25171
Emergency descent device
[NASA-CASE-MFS-23074-1] c54 N77-21844

EMISSION SPECTRA

Emission spectroscopy method for contamination monitoring of inert gas metal arc welding
[NASA-CASE-XMF-02039] c15 N71-15871

EMITTANCE

High thermal emittance black surface coatings and process for applying to metal and metal alloy surfaces used in radiative cooling of spacecraft
[NASA-CASE-XLA-06199] c15 N71-24875

EMITTERS

Inverted geometry transistor for use with monolithic integrated circuit
[NASA-CASE-ARC-10330-1] c09 N73-32112

EMULSIONS

Apparatus for obtaining isotropic irradiation on film emulsion from parallel radiation source
[NASA-CASE-MFS-20095] c24 N72-11595

ENAMELS

Refractory porcelain enamel passive control coating for high temperature alloys
[NASA-CASE-MFS-22324-1] c27 N75-27160

ENCAPSULATING

Development of bacteriostatic conformal coating and methods of application
[NASA-CASE-GSC-10007] c18 N71-16046
Flexible, repairable, portable composition for encapsulating electric connectors
[NASA-CASE-XGS-05180] c18 N71-25881
Test chambers with orifice and helium mass spectrometer for detecting leak rate of encapsulated semiconductor devices
[NASA-CASE-ERC-10150] c14 N71-28992
Electrically coupled individually encapsulated solar cell matrix
[NASA-CASE-NPO-11190] c03 N71-34044
Encapsulated solar cell modules
[NASA-CASE-LEW-12185-1] c44 N77-15490

ENCLOSURES

Method and apparatus for bowing of instrument panels to improve radio frequency shielded enclosure
[NASA-CASE-XMF-09422] c07 N71-19436

ENDOSCOPES

Borescope with adjustable hinged telescoping optical system

[NASA-CASE-MFS-15162]

c14 N72-32452

ENDOTHERMIC REACTIONS

Sensor device with switches for measuring surface recession of charring and noncharring ablators

[NASA-CASE-XLA-01781]

c14 N69-39975

ENEMY PERSONNEL

Development of electronic detection system for remotely determining number and movement of enemy personnel
[NASA-CASE-ARC-10097-2] c07 N73-25160

ENERGY ABSORPTION

Non-reusable kinetic energy absorber for application in soft landing of space vehicles
[NASA-CASE-XLE-00810] c15 N70-34861

Low onset rate energy absorber in form of strut assembly for crew couch of Apollo command module
[NASA-CASE-MSC-12279-1] c15 N70-35679

Air brake device for absorbing and measuring power from rotating shafts
[NASA-CASE-XLE-00720] c14 N70-40201

Design and development of double acting shock absorber for spacecraft docking operations
[NASA-CASE-XMS-03722] c15 N71-21530

Nonreusable energy absorbing device comprising ring member with plurality of recesses, cutting members, and guide member mounted in each recess
[NASA-CASE-XMF-10040] c15 N71-22877

Suspended mass oscillation damper based on impact energy absorption for damping wind induced oscillations of tall stacks, antennas, and umbilical towers
[NASA-CASE-LAR-10193-1] c15 N71-27146

Energy absorption device in high precision gear train for protection against damage to components caused by stop loads
[NASA-CASE-XMF-01848] c15 N71-28959

Shock absorber for use as protective barrier in impact energy absorbing system
[NASA-CASE-NFO-10671] c15 N72-20443

High energy absorption docking system design for docking large spacecraft
[NASA-CASE-MFS-20863] c31 N73-26876

Metal shearing energy absorber
[NASA-CASE-BQN-10638-1] c15 N73-30460

ENERGY CONSERVATION

Remote platform power conserving system
[NASA-CASE-GSC-11182-1] c15 N75-13007

ENERGY CONVERSION

Thermoelectric power conversion by liquid metal flowing through magnetic field
[NASA-CASE-XMF-00644] c03 N70-36803

Concentrator device for controlling direction of solar energy onto energy converters
[NASA-CASE-XLE-01716] c09 N70-40234

Device for converting electromagnetic wave energy into electric power
[NASA-CASE-GSC-11394-1] c09 N73-32109

Electric power generation system directory from laser power
[NASA-CASE-NPO-13308-1] c36 N75-30524

Mechanical thermal motor
[NASA-CASE-MFS-23062-1] c37 N77-12402

Low to high temperature energy conversion system
[NASA-CASE-NPO-13510-1] c44 N77-32581

Solar energy collection system
[NASA-CASE-NFO-13810-1] c44 N77-32582

ENERGY CONVERSION EFFICIENCY

Vacuum thermionic converter with short-circuited triodes and increased electron transmission and conversion efficiency
[NASA-CASE-XLE-01015] c03 N69-39898

Direct conversion of thermal energy into electrical energy using crossed electric and magnetic fields
[NASA-CASE-XLE-00212] c03 N70-34134

Increasing power conversion efficiency of electronic amplifiers by power supply switching
[NASA-CASE-XMS-00945] c09 N71-10798

ENERGY DISSIPATION

Energy dissipating shock absorbing system for land payload recovery or vehicle braking
[NASA-CASE-XLA-00754] c15 N70-34850

Motion restraining device --- for dissipating at a controlled rate the force of a moving body
[NASA-CASE-NPO-13619-1] c37 N75-22748

Wingtip vortex dissipator for aircraft
[NASA-CASE-LAR-11645-1] c02 N77-10001

ENERGY DISTRIBUTION

Method and apparatus for measurement of trap density and energy distribution in dielectric films
[NASA-CASE-NPO-13443-1] c76 N76-20994

ENERGY POLICY

Control for nuclear thermionic power source --- power supply circuits, energy policy
[NASA-CASE-NPO-13114-2] c44 N76-15573
Selective coating for solar panels --- energy policy
[NASA-CASE-LEW-12159-1] c44 N76-15603
Solar energy power system
[NASA-CASE-NFS-21628-2] c44 N76-23675
Thermal energy storage system --- operating on superheating of liquids
[NASA-CASE-NFS-23167-1] c44 N76-31667
Solar cell collector and method for producing same --- indium alloy coatings
[NASA-CASE-LEW-12552-1] c44 N77-17564
In-situ laser retorting of oil shale
[NASA-CASE-LEW-12217-1] c36 N77-18429
A non-tracking solar energy collector system
[NASA-CASE-NPO-13813-1] c44 N77-19579
Mount for continuously orienting a collector dish in a system adapted to perform both diurnal and seasonal solar tracking
[NASA-CASE-NFS-23267-1] c35 N77-20401
Solar energy collection system
[NASA-CASE-NPO-13579-2] c44 N77-20565
Low cost solar energy collection system
[NASA-CASE-NPO-13579-3] c44 N77-20566
A non-tracking solar energy collector system
[NASA-CASE-NPO-13817-1] c44 N77-28583
Solar pond
[NASA-CASE-NPO-13581-2] c44 N77-28584
Lightweight reflector assembly
[NASA-CASE-NPO-13707-1] c74 N77-28933
Solar photolysis of water
[NASA-CASE-NPO-13675-1] c44 N77-32580

ENERGY SOURCES

Energy source with tantalum capacitors in parallel and miniature silver oxide button cells for initiating pyrotechnic devices on spacecraft and rocket vehicles
[NASA-CASE-LAR-10367-1] c03 N70-26817
Pulse generator for synchronizing or resetting electronic signals without requiring separate external source
[NASA-CASE-XGS-03632] c09 N71-23311
Controllable high voltage source having fast settling time
[NASA-CASE-GSC-11844-1] c33 N75-19522

ENERGY STORAGE

Switching mechanism with energy stored in coil spring
[NASA-CASE-XGS-00473] c03 N70-38713
Stored charge transistor
[NASA-CASE-NPO-11156-2] c33 N75-31331
An improved rotatable mass for a flywheel
[NASA-CASE-NFS-23051-1] c37 N76-13500
An artificial leg employing a mechanical energy storage device for hip disarticulation
[NASA-CASE-ARC-10916-1] c54 N76-26871
Mechanical capacitor
[NASA-CASE-GSC-12030-1] c44 N76-30652
Safety flywheel
[NASA-CASE-BQN-10888-1] c37 N77-22484

ENERGY TECHNOLOGY

In-situ laser retorting of oil shale
[NASA-CASE-LEW-12217-1] c36 N77-18429
Solar energy collection system
[NASA-CASE-NPO-13579-2] c44 N77-20565
Method for producing solar energy panels by automation
[NASA-CASE-LEW-12541-1] c44 N77-22615
Solar energy collection system
[NASA-CASE-NPO-13810-1] c44 N77-32582

ENERGY TRANSFER

Solar energy absorber
[NASA-CASE-NFS-22743-1] c44 N76-22657
A thermal energy transformer
[NASA-CASE-NPO-14058-1] c44 N77-30616

ENGINE ANALYZERS

Indicated mean effective pressure instrument (INEP)
[NASA-CASE-LEW-12661-1] c35 N77-32461

ENGINE CONTROL

Direct current electromotive system for

regenerative braking of electric motor
[NASA-CASE-INP-01096] c10 N71-16030
Integrated lift/drag controller for aircraft
[NASA-CASE-ARC-10456-1] c05 N75-12930

ENGINE COOLANTS

Apparatus for cooling and injecting hypergolic propellants into combustion chamber of small rocket engine
[NASA-CASE-XLE-00303] c15 N70-36535
Injector manifold assembly for bipropellant rocket engines providing for fuel propellant to serve as coolant
[NASA-CASE-INP-00148] c28 N70-38710

ENGINE DESIGN

Design and development of gas turbine combustion unit with nozzle guide vanes for introducing diluent air into combustion gases
[NASA-CASE-XLE-103477-1] c28 N71-20330
Construction and method of arranging plurality of ion engines to form cluster thereby increasing efficiency and control by decreasing heat radiated to space
[NASA-CASE-INP-02923] c28 N71-23081
Space vehicle system
[NASA-CASE-MSC-12561-1] c18 N76-17185
Noise suppressor for turbo fan jet engines
[NASA-CASE-ARC-10812-1] c07 N76-18131
Fuel combustor
[NASA-CASE-LEW-12137-1] c20 N76-20215

ENGINE FAILURE

System for monitoring presence of neutrals in streams of ions - ion engine control
[NASA-CASE-INP-02592] c24 N71-20518

ENGINE INLETS

Variably positioned guide vanes for aerodynamic choking
[NASA-CASE-LAR-10642-1] c07 N74-31270
The engine air intake system
[NASA-CASE-ARC-10761-1] c07 N77-18154

ENGINE MONITORING INSTRUMENTS

System for monitoring presence of neutrals in streams of ions - ion engine control
[NASA-CASE-INP-02592] c24 N71-20518
Indicated mean effective pressure instrument (INEP)
[NASA-CASE-LEW-12661-1] c35 N77-32461

ENGINE NOISE

Variably positioned guide vanes for aerodynamic choking
[NASA-CASE-LAR-10642-1] c07 N74-31270
Apparatus and method for jet noise suppression
[NASA-CASE-LAR-11903-1] c07 N77-15036

ENGINE TESTS

Electric propulsion engine test chamber
[NASA-CASE-XLE-00252] c11 N70-34844

ENGINEERING DRAWINGS

High-temperature, high-pressure spherical segment valve
[NASA-CASE-XAC-00074] c15 N70-34817
Graphic illustration of lifting body design
[NASA-CASE-FBC-10063] c01 N71-12217
Specifications and drawings for semipassive optical communication system
[NASA-CASE-XLA-01090] c07 N71-12389
Method of making molded electric connector for use with flat conductor cables
[NASA-CASE-INP-03498] c15 N71-15986

ENTHALPY

Measuring conductive heat flow and thermal conductivity of laminar gas stream in cylindrical plug to simulate atmospheric reentry
[NASA-CASE-XLE-00266] c14 N70-34156

ENVIRONMENT SIMULATION

Method and apparatus for applying compressional forces to skeletal structure of subject to simulate force during ambulatory conditions
[NASA-CASE-ARC-10100-1] c05 N71-24738
Gravity environment simulation by locomotion and restraint aid for studying manual operation performance of astronauts at zero gravity
[NASA-CASE-ARC-10153] c05 N71-28619

ENVIRONMENT SIMULATORS

Space environment simulator for testing spacecraft components under aerospace conditions
[NASA-CASE-NPO-10141] c11 N71-24964

ENVIRONMENTAL CONTROL

Portable environmental control and life support system for astronaut in and out of spacecraft
[NASA-CASE-XMS-09632-1] c05 N71-11203

- Portable apparatus producing high velocity annular air column surrounding low velocity, filtered, superclean air central core for industrial clean room environmental control [NASA-CASE-XMF-03212] c15 N71-22721
- Development and characteristics of thermal sensitive panel for controlling ratio of solar absorptivity to surface emissivity for space vehicle temperature control [NASA-CASE-XIA-07728] c33 N71-22890
- Dual solid cryogenics for spacecraft refrigeration insuring low temperature cooling for extended periods [NASA-CASE-GSC-10188-1] c23 N71-24725
- Vibration control of flexible bodies in steady accelerating environment [NASA-CASE-LAR-10106-1] c15 N71-27169
- Test chamber for determining decomposition and autoignition of materials used in spacecraft under controlled environmental conditions [NASA-CASE-KSC-10198] c11 N71-28629
- Readily assembled universal environment housing for electronic equipment [NASA-CASE-KSC-10031] c15 N72-22486
- Environmentally controlled suit for working in sterile chamber [NASA-CASE-LAR-10076-1] c05 N73-20137
- Dual stage check valve for cryogenic supply systems used in space flight environmental control system [NASA-CASE-MSC-13587-1] c15 N73-30459
- Spacecraft with artificial gravity and earthlike atmosphere [NASA-CASE-LEW-11101-1] c31 N73-32750
- ENVIRONMENTAL ENGINEERING**
- Thermal control wall panel with application to spacecraft cabins [NASA-CASE-XLA-01243] c33 N71-22792
- ENVIRONMENTAL TESTS**
- Multisample test chamber for exposing materials to X rays, temperature change, and gaseous conditions and determination of material effects [NASA-CASE-XMS-02930] c11 N71-23042
- Space suit using nonflexible material with low leakage and providing protection against thermal extremes, physical punctures, and radiation with high mobility articulation [NASA-CASE-XAC-07043] c05 N71-23161
- Flammability test chamber for testing materials in certain predetermined environments [NASA-CASE-KSC-10126] c11 N71-24985
- Multiaxes vibration device for making vibration tests along orthogonal axes of test specimen [NASA-CASE-MFS-20242] c14 N73-19421
- ENVIRONMENTS**
- Hermetically sealed elbow actuator for use in severe environments [NASA-CASE-MFS-14710] c09 N72-22195
- ENZYME ACTIVITY**
- Use of enzyme hexokinase and glucose to reduce inherent light levels of ATP in luciferase compositions [NASA-CASE-XGS-05533] c04 N69-27487
- Enzymatic luminescent bioassay method for determining bacterial levels in urine [NASA-CASE-GSC-11092-2] c04 N73-27052
- ENZYMES**
- Protein sterilization of firefly luciferase without denaturation [NASA-CASE-GSC-10225-1] c06 N73-27086
- EPICYCLOIDS**
- Sequencing device utilizing planetary gear set [NASA-CASE-MSC-19514-1] c37 N77-19459
- EPOXY COMPOUNDS**
- Synthesis of siloxane containing epoxy polymers with low dielectric properties [NASA-CASE-MFS-13994-1] c06 N71-11240
- Synthesis of siloxane containing epoxide and diamine polymers [NASA-CASE-MFS-13994-2] c06 N72-25148
- EPOXY RESINS**
- Nonmagnetic hermetically sealed battery case made of epoxy resin and woven glass tape for use with electrochemical cells in spacecraft [NASA-CASE-XGS-00886] c03 N71-11053
- Epoxy resin sealing device for electrochemical cells in high vacuum environments [NASA-CASE-XGS-02630] c03 N71-22974
- Cold metal hydroforming techniques using epoxy molds for counteracting creep or stretch [NASA-CASE-XLE-05641-1] c15 N71-26346
- Miniature electromechanical junction transducer operating on piezjunction effect and utilizing epoxy for stress coupling component [NASA-CASE-ERC-10087] c14 N71-27334
- Infusible polymer production from reaction of polyfunctional epoxy resins with polyfunctional aziridine compounds [NASA-CASE-NFO-10701] c06 N71-28620
- Method of repairing discontinuity in fiberglass structures [NASA-CASE-LAR-10416-1] c24 N74-30001
- Transparent fire resistant polymeric structures [NASA-CASE-ARC-10813-1] c27 N76-16230
- Composite sandwich lattice structure [NASA-CASE-LAR-11898-1] c24 N77-15103
- EQUIPMENT**
- Biometallic fluid displacement apparatus --- for stirring and heating stored gases and liquids [NASA-CASE-ARC-10441-1] c35 N74-15126
- EQUIPMENT SPECIFICATIONS**
- Differential pressure cell insensitive to changes in ambient temperature and extreme overload [NASA-CASE-XAC-00042] c14 N70-34816
- High-temperature, high-pressure spherical segment valve [NASA-CASE-XAC-00074] c15 N70-34817
- Remote-reading torquemeter for use where high horsepower are transmitted at high rotative speeds [NASA-CASE-XLE-00503] c14 N70-34818
- Magnetically centered liquid column float [NASA-CASE-XAC-00030] c14 N70-34820
- Electric propulsion engine test chamber [NASA-CASE-XLE-00252] c11 N70-34844
- Channel-type shell construction for rocket engines and related configurations [NASA-CASE-XLE-00144] c28 N70-34860
- Non-reusable kinetic energy absorber for application in soft landing of space vehicles [NASA-CASE-XLE-00810] c15 N70-34861
- Silt regulated gas journal bearing [NASA-CASE-XMP-00476] c15 N70-38620
- Specifications and drawings for semipassive optical communication system [NASA-CASE-XLA-01090] c07 N71-12389
- Stretcher with rigid head and neck support with capability of supporting immobilized person in vertical position for removal from vehicle hatch to exterior also useful as splint stretcher [NASA-CASE-XMP-06589] c05 N71-23159
- Development of vortex fluid amplifier for throttling rocket exhaust [NASA-CASE-LEW-10374-1] c28 N73-13773
- Simplified technique and device for producing industrial grade synthetic diamonds [NASA-CASE-MFS-20698-2] c15 N73-19457
- Anti-buckling fatigue test assembly --- for subjecting metal specimen to tensile and compressive loads at constant temperature [NASA-CASE-LAR-10426-1] c09 N74-19528
- Apparatus for conducting flow electrophoresis in the substantial absence of gravity [NASA-CASE-MFS-21394-1] c34 N74-27744
- Thermocouple tape --- developed from thermoelectrically different metals [NASA-CASE-LEW-11072-2] c35 N76-15434
- EQUIPOTENTIALS**
- Equipotential space suits utilizing mechanical aids to minimize astronaut energy at bending joints [NASA-CASE-LAR-10007-1] c05 N71-11195
- Instrument for measuring potentials on two dimensional electric field plot [NASA-CASE-XLA-08493] c10 N71-19421
- ERGONOMETICS**
- Development of restraint system for securing personnel to ergometer while exercising under weightless conditions [NASA-CASE-MFS-21046-1] c14 N73-27377
- Versatile ergometer with work load control [NASA-CASE-MFS-21109-1] c05 N73-27941
- Tilting table for testing human body in variety of positions while exercising on ergometer or other biomedical devices

- [NASA-CASE-MFS-21010-1] c05 N73-30078
Pneumatic foot pedal operated fluidic exercising device
[NASA-CASE-MSC-11561-1] c05 N73-32014
Ergometer calibrator --- for any ergometer utilizing rotating shaft
[NASA-CASE-MFS-21045-1] c35 N75-15932
- EROSION**
Thermal shock and erosion resistant tantalum carbide ceramic material
[NASA-CASE-LAR-11902-1] c27 N76-23436
- ERROR ANALYSIS**
Development of computer program for estimating reliability of self-repair and fault-tolerant systems with respect to selected system and mission parameters
[NASA-CASE-NFO-13086-1] c15 N73-12495
Bit error rate measurement above and below bit rate tracking threshold
[NASA-CASE-MSC-12743-1] c32 N77-19290
- ERROR CORRECTING DEVICES**
Error correction circuitry for binary signal channels
[NASA-CASE-XNP-03263] c09 N71-18843
Multiplexed communication system design including automatic correction of transmission errors introduced by frequency spectrum shifts
[NASA-CASE-XNP-01306] c07 N71-20814
Description of error correcting methods for use with digital data computers and apparatus for encoding and decoding digital data
[NASA-CASE-XNP-02748] c08 N71-22749
Failure detection and control means for improved drift performance of a gimbaled platform system
[NASA-CASE-MFS-23551-1] c04 N76-26175
Guide for a typewriter
[NASA-CASE-MFS-15218-1] c37 N77-19457
- ERROR DETECTION CODES**
Self testing and repairing computer comprising control and diagnostic unit and rollback points for error correction
[NASA-CASE-NFO-10567] c08 N71-24633
- ERROR SIGNALS**
Error correction circuitry for binary signal channels
[NASA-CASE-XNP-03263] c09 N71-18843
Feedback controller for sampling error signals within single control formulation time interval
[NASA-CASE-GSC-10554-1] c08 N71-29033
Bit error rate measurement above and below bit rate tracking threshold
[NASA-CASE-MSC-12743-1] c32 N77-19290
- ERRORS**
Analog to digital converter using offset voltage to eliminate errors
[NASA-CASE-MSC-13110-1] c08 N72-22163
- ESCAPE CAPSULES**
Aerial capsule emergency separation device using jettisonable towers
[NASA-CASE-XLA-00115] c03 N70-33343
Emergency escape cabin system for launch towers
[NASA-CASE-XRS-02342] c05 N71-11199
Spacecraft design with single point aerodynamic and hydrodynamic stability for emergency transport of men from space station to splashdown
[NASA-CASE-MSC-13281] c31 N72-18859
- ESCAPE SYSTEMS**
Design and specifications of emergency escape system for spacecraft structures
[NASA-CASE-MSC-12086-1] c05 N71-12345
Automatic braking device for rapidly transferring humans or materials from elevated location
[NASA-CASE-XRS-07814] c15 N71-27067
- ESTERS**
Fluorinated esters of polycarboxylic acid and lubricating compositions for use at extreme temperature
[NASA-CASE-MFS-21040-1] c06 N73-30098
- ETCHING**
Reusable masking boot for chemical machining operations
[NASA-CASE-XNP-02092] c15 N70-42033
Development of method for etching copper
[NASA-CASE-XGS-06306] c17 N71-16044
Composition and process for improving definition of resin masks used in chemical etching
[NASA-CASE-XGS-04993] c14 N71-17574
- Etching aluminum alloys with aqueous solution containing sulfuric acid, hydrofluoric acid, and an alkali metal dichromate for adhesive bonding
[NASA-CASE-XNP-02303] c17 N71-23828
Selective plating of etched circuits without removing previous plating
[NASA-CASE-XGS-03120] c15 N71-24047
Nickel plating onto etched aluminum castings
[NASA-CASE-XNP-04148] c17 N71-24830
Scanning nozzle plating system --- for etching or plating metals on substrates without masking
[NASA-CASE-NFO-11758-1] c31 N74-23065
- ETHERS**
Method for producing alternating ether-siloxane copolymers with stable properties when exposed to elevated temperatures and UV radiation
[NASA-CASE-XNP-02584] c06 N71-20905
Chemical synthesis of hydroxy terminated perfluoro ethers as intermediates for highly fluorinated polyurethane resins
[NASA-CASE-NFO-10768] c06 N71-27254
Formation of polyurethane resins from hydroxy terminated perfluoro ethers
[NASA-CASE-NFO-10768-2] c06 N72-27144
- ETHYLENE OXIDE**
Using ethylene oxide in preparation of sterilized solid rocket propellants and encapsulating materials
[NASA-CASE-XNP-01749] c27 N70-41897
Ethylene oxide sterilization and encapsulating process for sterile preservation of instruments and solid propellants
[NASA-CASE-XNP-09763] c14 N71-20461
- EUTECTIC ALLOYS**
Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-1] c37 N75-15992
Method of growing composites of the type exhibiting the Soret effect --- improved structure of eutectic alloy crystals
[NASA-CASE-MFS-22926-1] c24 N77-27187
Directionally solidified eutectic gamma plus beta nickel-base superalloys
[NASA-CASE-LEW-12906-1] c26 N77-32279
- EVACUATING (VACUUM)**
Filling honeycomb matrix with deaerated paste filler
[NASA-CASE-XMS-01108] c15 N69-24322
Sealing evacuation port and evacuating vacuum container such as space jackets
[NASA-CASE-XNP-03290] c15 N71-23256
Gas leak detection in evacuated systems using ultraviolet radiation probe
[NASA-CASE-ERC-10034] c15 N71-24896
Evacuated, displacement compression mold --- of tubular bodies from thermosetting plastics
[NASA-CASE-LAR-10782-2] c31 N75-13111
- EVAPORATION**
Evaporating crucible of tantalum-tungsten foil, nickel alumina bonding agent, and ceramic coating
[NASA-CASE-XLA-03105] c15 N69-27483
- EVAPORATIVE COOLING**
Tubular sublimatory evaporator heat sink
[NASA-CASE-ARC-10912-1] c34 N77-19353
- EVAPORATORS**
Spatter proof evaporant source design for use in vacuum deposition of solid thin films on substrates
[NASA-CASE-XNP-06065] c15 N71-20395
Means of vapor deposition using electric current and evaporator filament
[NASA-CASE-LAR-10541-1] c15 N72-32487
- EXAMINATION**
An improved method and apparatus for use in examining the lattice of a semiconductor wafer by X-ray diffraction
[NASA-CASE-MFS-23315-1] c76 N76-32029
- EXHAUST GASES**
Device for adding water to high velocity exhaust jets to reduce velocity, noise, and temperature
[NASA-CASE-XNP-01813] c28 N70-41582
Gas turbine exhaust nozzle --- for noise reduction
[NASA-CASE-LEW-11569-1] c07 N74-15453
Abating exhaust noises in jet engines
[NASA-CASE-ARC-10712-1] c07 N74-33218
Exhaust flow deflector --- for ducted gas flow
[NASA-CASE-LAR-11570-1] c34 N76-18364

EXHAUST NOZZLES

High thrust annular liquid propellant rocket engine and exhaust nozzle design
[NASA-CASE-XLE-00078] c28 N70-33284

Exhaust nozzle with afterburning for generating thrust
[NASA-CASE-XLA-00154] c28 N70-33374

Penshaped, supersonic exhaust nozzle design
[NASA-CASE-XLE-00057] c28 N70-38711

Automatic ejection valve for attitude control and midcourse guidance of space vehicles
[NASA-CASE-XNP-00676] c15 N70-38996

Jet aircraft exhaust nozzle for noise reduction
[NASA-CASE-LAR-10951-1] c28 N73-19819

Two dimensional wedge/translating shroud nozzle
[NASA-CASE-LAR-11919-1] c07 N76-22202

EXOTHERMIC REACTIONS

Intumescent-ablator coatings using endothermic fillers
[NASA-CASE-ARC-11043-1] c34 N77-14372

EXPANDABLE STRUCTURES

Expanding and contracting connector strip for solar cell array of Nimbus satellite
[NASA-CASE-XGS-01395] c03 N69-21539

Method of compactly packaging centrifugally expandable lightweight flexible reflector satellite
[NASA-CASE-XLA-00138] c31 N70-37981

Foldable conduit capable of springing back as self erecting structural member
[NASA-CASE-XLE-00620] c32 N70-41579

Collapsible high gain antenna which can be automatically expanded to operating state
[NASA-CASE-RSC-10392] c07 N73-26117

Expandable space frames with high expansion to collapse ratio
[NASA-CASE-ERC-10365-1] c31 N73-32749

Means for accommodating large overstrain in lead wires --- by storing extra length of wire in stretchable loop
[NASA-CASE-LAR-10168-1] c33 N74-22865

EXPANSION

Apparatus for measuring polymer membrane expansion in electrochemical cells
[NASA-CASE-XGS-03665] c14 N69-21363

EXPERIMENTAL DESIGN

Efficient operation of improved hydrofoil design
[NASA-CASE-XLA-00229] c12 N70-33305

Sealed electric storage battery with gas manifold interconnecting each cell
[NASA-CASE-XNP-03378] c03 N71-11051

Electrode attached to helmets for detecting low level signals from skin of living creatures
[NASA-CASE-ABC-10043-1] c05 N71-11193

Space suit using nonflexible material with low leakage and providing protection against thermal extremes, physical punctures, and radiation with high mobility articulation
[NASA-CASE-XAC-07043] c05 N71-23161

EXPLOSIONS

Device for detection of combustion light preceding gaseous explosions
[NASA-CASE-LAR-10739-1] c14 N73-16484

EXPLOSIVE DEVICES

Stage separation using remote control release of joint with explosive insert
[NASA-CASE-XLA-02854] c15 N69-27490

Hermetically sealed explosive release mechanism for actuator device
[NASA-CASE-XGS-00824] c15 N71-16078

Development of non-magnetic indexing device for orienting magnetic flux sensing instrument in magnetic field without generation of detrimental magnetic fields
[NASA-CASE-XGS-02422] c15 N71-21529

Development of apparatus for detonating explosive devices in order to determine forces generated and detonation propagation rate
[NASA-CASE-LAR-10800-1] c33 N72-27959

Development and characteristics of squib actuated explosive disconnect for spacecraft release from launch vehicle
[NASA-CASE-NPO-11330] c33 N73-26958

EXPLOSIVE FORMING

Electric discharge apparatus for electrohydraulic explosive forming
[NASA-CASE-XMF-00375] c15 N70-34249

EXPLOSIVE WELDING

Method for eliminating noise and debris of

explosive welding techniques by using complete enclosure
[NASA-CASE-LAR-10941-2] c15 N73-32371

Totally confined explosive welding --- apparatus to reduce noise level and protect personnel during explosive bonding
[NASA-CASE-LAR-10941-1] c37 N74-21057

Method of making an explosively welded scarf joint
[NASA-CASE-LAR-11211-1] c37 N75-12326

EXPLOSIVES

Production of intermetallic compounds by effect of shock waves from explosions and compaction of powder
[NASA-CASE-MFS-20861-1] c18 N73-32437

Optically detonated explosive device
[NASA-CASE-NFO-11743-1] c28 N74-27425

Electroexplosive device
[NASA-CASE-NFO-13858-1] c28 N77-17258

EXPONENTIAL FUNCTIONS

Digital quasi-exponential function generator
[NASA-CASE-NFO-11130] c08 N72-20176

EXPOSURE

Mechanical exposure interlock device for preventing film overexposure in oscilloscope camera
[NASA-CASE-LAR-10319-1] c14 N73-32322

EXPULSION BLADDERS

Expulsion bladder equipped storage tank structure
[NASA-CASE-XNP-00612] c11 N70-38182

Rubber composition for expulsion bladders and diaphragms for use with hydrazine
[NASA-CASE-NFO-11433] c18 N71-31140

EXTENSIONS

Support for flexible conductor cable between drawers or racks holding electronic equipment and cabinet assembly housing drawers or racks
[NASA-CASE-XMF-07587] c15 N71-18701

Automatically lockable axially extensible strut --- for helicopters
[NASA-CASE-LAR-11900-1] c05 N77-18134

EXTENSOMETERS

Transducer frame for use with extensometer to continuously monitor specimen sample
[NASA-CASE-XLA-10322] c15 N72-17452

Conductive elastomeric extensometer
[NASA-CASE-MFS-21049-1] c52 N74-27864

Laser extensometer
[NASA-CASE-MFS-19259-1] c36 N77-10516

Amplifying ribbon extensometer
[NASA-CASE-LAR-11825-1] c35 N77-22449

EXTRACTION

Liquid-gas separator adapted for use in zero gravity environment - drawings
[NASA-CASE-XMS-01624] c15 N70-40062

EXTRAVEHICULAR ACTIVITY

Portable environmental control and life support system for astronaut in and out of spacecraft
[NASA-CASE-XMS-09632-1] c05 N71-11203

Hand-held maneuvering unit for propulsion and attitude control of astronauts in zero or reduced gravity environment
[NASA-CASE-XMS-05304] c05 N71-12336

Internal and external serpentine devices for performing physical operations around orbital space stations
[NASA-CASE-XMF-05344] c31 N71-16345

Releasable, pin-type fastener, easily operated during EVA
[NASA-CASE-ARC-10140-1] c15 N71-17653

Design and development of flexible tunnel for use by spacecrews in performing extravehicular activities
[NASA-CASE-MSC-12243-1] c05 N71-24728

Open loop life support subsystem using breathing bag as reservoir for EVA
[NASA-CASE-MSC-12411-1] c05 N72-20096

Intra- and extravehicular life support space suite for Apollo astronauts
[NASA-CASE-MSC-12609-1] c05 N73-32012

EXTREMELY LOW RADIO FREQUENCIES

VHF/UHF parasitic probe antenna for spacecraft communication
[NASA-CASE-XKS-09340] c07 N71-24614

EXTRUDING

Extrusion can for extruding ceramics under heat and pressure
[NASA-CASE-NPO-10812] c15 N73-13464

Brazing alloy binder
[NASA-CASE-XMF-05868] c26 N75-27125

EYE (ANATOMY)

- Sight switch using infrared source and sensor mounted beside eye
[NASA-CASE-XMP-03934] c09 N71-22985
- Ultrasonic device for ophthalmic eye surgery with safe removal of macerated material
[NASA-CASE-LFW-11669-1] c05 N73-27062
- Spectrally balanced chromatic landing approach lighting system
[NASA-CASE-ARC-10990-1] c04 N77-12031
- Corneal seal device
[NASA-CASE-LFW-12258-1] c52 N77-28716

EYE DISEASES

- Flow compensating pressure regulator --- for ophthalmic applications
[NASA-CASE-LFW-12718-1] c35 N77-20408

EYE EXAMINATIONS

- Automated visual sensitivity tester for determining visual field sensitivity and blind spot size
[NASA-CASE-ARC-10329-1] c05 N73-26072
- Multiparameter vision testing apparatus
[NASA-CASE-MSC-13601-2] c54 N75-27759
- Visual examination apparatus
[NASA-CASE-EE-ARC-10329-2] c52 N76-30793

EYEPIECES

- Wide angle eyepiece with long eye-relief distance
[NASA-CASE-XMS-06056-1] c23 N71-24857

F

FABRICATION

- Fabrication of pressure-telemetry transducers
[NASA-CASE-XNP-09752] c14 N69-21541
- Fabrication method for lightweight regeneratively cooled combustion chamber of channel construction
[NASA-CASE-XLE-00150] c28 N70-41818
- Fabrication methods for matrices of solar cell submodules
[NASA-CASE-XNP-05821] c03 N71-11056
- Capacitor fabrication by solidifying mixture of ferromagnetic metal particles, nonferromagnetic particles, and dielectric material
[NASA-CASE-LFW-10364-1] c09 N71-13522
- Method and apparatus for fabricating solar cell panels
[NASA-CASE-XNP-03413] c03 N71-26726
- Fabrication of root cord restrained fabric suit sections from sheets of fabric
[NASA-CASE-MSC-12398] c05 N72-20098
- Method of fabricating equal length insulated wire
[NASA-CASE-FRC-10038] c15 N72-20444
- Development of thin film temperature sensor from TaO
[NASA-CASE-NFO-11775] c26 N72-28761
- Fabrication of polycrystalline solar cells on low-cost substrates
[NASA-CASE-GSC-12022-1] c44 N76-28635
- Lightweight reflector assembly
[NASA-CASE-NFO-13707-1] c74 N77-28933

FABRICS

- Fabrication of root cord restrained fabric suit sections from sheets of fabric
[NASA-CASE-MSC-12398] c05 N72-20098
- Nozzle extraction process and handlemeter for measuring handle
[NASA-CASE-LAR-12147-1] c27 N77-10198
- Amplifying ribbon extensometer
[NASA-CASE-LAR-11825-1] c35 N77-22449

FABRY-PEROT INTERFEROMETERS

- Fabry-Perot interferometer retrodirective reflector modulator for optical communication
[NASA-CASE-XGS-04480] c16 N69-27491

FACSIMILE COMMUNICATION

- Restoration and improvement of demodulated facsimile video signals
[NASA-CASE-GSC-10185-1] c07 N72-12081
- Spectrometer integrated with a facsimile camera
[NASA-CASE-LAR-11207-1] c35 N75-19613

FACTIORIAL DESIGN

- Space suit with pressure-volume compensator system
[NASA-CASE-XLA-05332] c05 N71-11194
- Equipotential space suits utilizing mechanical aids to minimize astronaut energy at bending joints
[NASA-CASE-LAR-10007-1] c05 N71-11195

FAIL-SAFE SYSTEMS

- Fail-safe multiple transformer circuit configuration
[NASA-CASE-NFO-11078] c09 N72-25262
- Latch mechanism
[NASA-CASE-MSC-12549-1] c37 N74-27903

FAILURE MODES

- Method for reducing mass of ball bearings for long life operation at high speed
[NASA-CASE-LFW-10856-1] c15 N72-22490
- Inverter ratio failure detector
[NASA-CASE-NFO-13160-1] c35 N74-18090

FAIRINGS

- System for deploying and ejecting releasable clamshell fairing sections from spinning sounding rockets
[NASA-CASE-GSC-10590-1] c31 N73-14853

FALLING SPHERES

- Device for determining acceleration of gravity by interferometric measurement of travel of falling body
[NASA-CASE-XMP-05844] c14 N71-17587

FAR INFRARED RADIATION

- Collimator for analyzing spatial location of near and distant sources of radiation
[NASA-CASE-MFS-20546-2] c14 N73-30389

FAR ULTRAVIOLET RADIATION

- Transient heat transfer gage for measuring total radiant intensity from far ultraviolet and ionized high temperature gases
[NASA-CASE-XNP-09802] c33 N71-15641

FASTENERS

- Force measuring instrument for structural members, particularly fastening bolts or studs
[NASA-CASE-XNP-00456] c14 N70-34705
- Lightweight life preserver without fastening devices
[NASA-CASE-XMS-00864] c05 N70-36493
- Nut and bolt fastener permitting all-directional movement of skin sections with respect to supporting structure
[NASA-CASE-XLA-01807] c15 N71-10799
- Releasable, pin-type fastener, easily operated during EVA
[NASA-CASE-ARC-10140-1] c15 N71-17653
- Ultrasonic wrench for applying vibratory energy to mechanical fasteners
[NASA-CASE-MFS-20586] c15 N71-17686
- Design and development of electric connectors for rigid and semirigid coaxial cables
[NASA-CASE-XNP-04732] c09 N71-20851
- Design, development, and characteristics of latching mechanism for operation in limited access areas
[NASA-CASE-XMS-03745] c15 N71-21076
- Design and development of module joint clamping device for application to solar array construction
[NASA-CASE-XNP-02341] c15 N71-21531
- Threadless fastener apparatus comprising receiving apertures for plurality of articles, self-locked condition, and capable of using nonmalleable materials in both ends
[NASA-CASE-XPR-05302] c15 N71-23254
- Development of resilient fastener for attaching skin of aerospace vehicles to permit movement of skin relative to framework
[NASA-CASE-XLA-01027] c31 N71-24035
- Pneumatic mechanism for releasing hook and loop fasteners between large rigid structures
[NASA-CASE-XMS-10660-1] c15 N71-25975

FATIGUE (MATERIALS)

- Servocontrol system for measuring local stresses at geometric discontinuity in stressed material
[NASA-CASE-XLA-08530] c32 N71-25360
- TV fatigue crack monitoring system
[NASA-CASE-LAR-11490-1] c35 N76-28530

FATIGUE LIFE

- Fatigue resistant shear pin with hollow shaft and two plugs
[NASA-CASE-XLA-09122] c15 N69-27505
- Improving load capacity and fatigue life of rolling element systems in rockets and missiles
[NASA-CASE-XLE-02999] c15 N71-16052
- Method for reducing mass of ball bearings for long life operation at high speed
[NASA-CASE-LFW-10856-1] c15 N72-22490
- Fatigue life of hybrid antifriction bearings at ultrahigh speeds

- [NASA-CASE-LEW-11152-1] c15 N73-32359
 A machine for use in monitoring fatigue life for a plurality of elastomeric specimens
 [NASA-CASE-NFO-13731-1] c39 N76-17427
- FATIGUE TESTING MACHINES**
 Cryostat for use with horizontal fatigue testing machines at low temperatures
 [NASA-CASE-XMF-10968] c14 N71-24234
 Fatigue testing apparatus with light shield and infrared reflector for high temperature evaluation of loaded sheet samples
 [NASA-CASE-XLA-01782] c14 N71-26136
 A machine for use in monitoring fatigue life for a plurality of elastomeric specimens
 [NASA-CASE-NFO-13731-1] c39 N76-17427
- FATIGUE TESTS**
 Fatigue testing device applying random discrete load levels to test specimen and applicable to aircraft structures
 [NASA-CASE-XLA-02131] c32 N70-42003
- FATS**
 Oil and fat absorbing polymers
 [NASA-CASE-NFO-11609-2] c27 N77-31308
- FECEs**
 Fecal waste disposal container
 [NASA-CASE-XMS-06761] c05 N69-23192
- FEED SYSTEMS**
 Nonconductive tube as feed system for plasma thruster
 [NASA-CASE-XIE-02902] c25 N71-21694
 Method and apparatus for pressurizing propellant tanks used in propulsion motor feed system
 [NASA-CASE-XNP-00650] c27 N71-28929
 Pressurized tank for feeding liquid waste into processing equipment
 [NASA-CASE-LAR-10365-1] c05 N72-27102
 Pressurized inert gas feed for lighting system
 [NASA-CASE-XSC-10644] c09 N72-27227
 Dual frequency feed systems for Cassegrainian antennas
 [NASA-CASE-NPO-13091-1] c09 N73-12214
 Improved injector with porous plug for bubbles of gas into feed lines of electrically conductive liquid
 [NASA-CASE-NFO-11377] c15 N73-27406
- FEEDBACK**
 RC networks with voltage amplifier, RC input circuit, and positive feedback
 [NASA-CASE-ARC-10020] c10 N72-17172
 Multistage feedback shift register with states decomposable into cycles of equal length
 [NASA-CASE-NPO-11082] c08 N72-22167
 Inverter oscillator with voltage feedback
 [NASA-CASE-NPO-10760] c09 N72-25254
 Wide power range microwave feedback controller
 [NASA-CASE-GSC-12146-1] c33 N77-21322
- FEEDBACK AMPLIFIERS**
 Development of system with electrical properties which vary with changes in temperature for use with feedback loop in operational amplifier circuit
 [NASA-CASE-MSC-13276-1] c14 N71-27058
 Phase locked demodulator with bandwidth switching amplifier circuit
 [NASA-CASE-XNP-01107] c10 N71-28859
 Monostable multivibrator for producing output pulse widths with positive feedback NOR gates
 [NASA-CASE-MSC-13492-1] c10 N71-28860
- FEEDBACK CIRCUITS**
 Low power drain transistor feedback circuit
 [NASA-CASE-XGS-04999] c09 N69-24317
 Linear three-tap feedback shift register
 [NASA-CASE-NFO-10351] c08 N71-12503
 Frequency control network for current feedback oscillators converting dc voltage to ac or higher dc voltages
 [NASA-CASE-GSC-10041-1] c10 N71-19418
 Feedback integrating circuit with grounded capacitor for signal processing
 [NASA-CASE-XAC-10607] c10 N71-23669
 Development of idler feedback system to reduce electronic noise problem in two parametric amplifiers
 [NASA-CASE-LAR-10253-1] c09 N72-25258
 Linear shift register with feedback logic for generating pseudonoise linear recurring binary sequences
 [NASA-CASE-NPO-11406] c08 N73-12175
- Logarithmic circuit with wide dynamic range
 [NASA-CASE-GSC-12145-1] c33 N77-19319
 Digital automatic gain amplifier
 [NASA-CASE-KSC-11008-1] c33 N77-21321
- FEEDBACK CONTROL**
 Describing continuous analog to digital converter with parallel digital output and nonlinear feedback
 [NASA-CASE-XAC-04031] c08 N71-18594
 Pulsed magnetic core memory element with blocking oscillator feedback for interrogation without loss of digital information
 [NASA-CASE-XGS-03303] c08 N71-18595
 Binary to decimal decoder logic circuit design with feedback control and display device
 [NASA-CASE-XKS-06167] c08 N71-24890
 Feedback control for direct current motor to achieve constant speed under varying loads
 [NASA-CASE-MFS-14610] c09 N71-28886
 Feedback controller for sampling error signals within single control formulation time interval
 [NASA-CASE-GSC-10554-1] c08 N71-29033
 Closed loop servosystem for variable speed tape recorders onboard spacecraft
 [NASA-CASE-NPO-10700] c07 N71-33613
 Development of aerodynamic control system to control flutter over large range of oscillatory frequencies using stability augmentation techniques
 [NASA-CASE-LAR-10682-1] c02 N73-26004
 Regulated dc-to-dc converter for voltage step-up or step-down with input-output isolation
 [NASA-CASE-HQN-10792-1] c33 N74-11049
 System and method for tracking a signal source --- employing feedback control
 [NASA-CASE-HQN-10880-1] c32 N75-30385
 Diffused waveguiding capillary tube with distributed feedback for a gas laser
 [NASA-CASE-NPO-13544-1] c36 N76-18428
 Closed loop spray cooling apparatus --- for particle accelerator targets
 [NASA-CASE-LEW-11981-1] c37 N76-20486
 The dc-to-dc converters employing staggered-phase power switches with two-loop control
 [NASA-CASE-NPO-13512-1] c33 N77-10428
- FEEDBACK FREQUENCY MODULATION**
 Method and apparatus for communicating through ionized layer of gases surrounding spacecraft during reentry into planetary atmospheres
 [NASA-CASE-XLA-01127] c07 N70-41372
 Characteristics of data-aided carrier tracking loop used for tracking carrier in angle modulated communications system
 [NASA-CASE-NPO-11282] c10 N73-16205
 Linear phase demodulator including a phase locked loop with auxiliary feedback loop
 [NASA-CASE-GSC-12018-1] c33 N77-14334
- FEEDERS**
 Automatic real-time pair-feeding system for animals
 [NASA-CASE-ARC-10302-1] c51 N74-15778
- FELTS**
 Thermal insulation attaching means --- adhesive bonding of felt vibration isolators under ceramic tiles
 [NASA-CASE-MSC-12619-2] c16 N77-31237
- FEMALES**
 Liquid cooled brassiere and method of diagnosing malignant tumors therewith
 [NASA-CASE-ABC-11007-1] c52 N77-14736
- FERRITES**
 Magnetic recording head composed of ferrite core coated with thin film of aluminum-iron-silicon alloy
 [NASA-CASE-GSC-10097-1] c08 N71-27210
 Method for making conductors for ferrite memory arrays --- from pre-formed metal conductors
 [NASA-CASE-LAR-10994-1] c24 N75-13032
 Device for measuring the ferrite content in an austenitic stainless-steel weld
 [NASA-CASE-MFS-22907-1] c26 N76-18257
- FERRONAGNETISM**
 High temperature ferromagnetic cobalt-base alloy for electrical power generating equipment
 [NASA-CASE-XLE-03629] c17 N71-23248
- FIBER OPTICS**
 Fiber optic transducers for monitoring and analysis of vibration in aerospace vehicles

- and onboard equipment
[NASA-CASE-XMP-02433] c14 N71-10616
- Filter distributed feedback laser
[NASA-CASE-NFO-13531-1] c36 N76-24553
- Fiber optic multiplex optical transmission system
[NASA-CASE-KSC-11047-1] c74 N77-15826
- FIBERS**
- Process for fiberizing ceramic materials with high fusion temperatures and tensile strength
[NASA-CASE-INP-00597] c18 N71-23088
- Method and apparatus for fluffing, separating, and cleaning fibers
[NASA-CASE-LAR-11224-1] c37 N76-18456
- Polymeric electrolytic hygrometer
[NASA-CASE-NFO-13948-1] c35 N77-28470
- FIELD EFFECT TRANSISTORS**
- Frequency to analog converters with unipolar field effect transistor for determining potential charge by pulse duration of input signal
[NASA-CASE-INP-07040] c08 N71-12500
- Voltage controlled, variable frequency relaxation oscillator with MOSFET variable current feed
[NASA-CASE-GSC-10022-1] c10 N71-25882
- Circuitry for high input impedance video processor with high noise immunity
[NASA-CASE-NFO-10199] c09 N72-17156
- Development and characteristics of data multiplexer circuit using field effect transistors arranged in tree switching configuration
[NASA-CASE-NFO-11333] c08 N72-22162
- Single integrated circuit chip with field effect transistor
[NASA-CASE-GSC-10835-1] c09 N72-33205
- Radiation hardening of MOS devices by boron --- for stabilizing gate threshold potential of field effect device
[NASA-CASE-GSC-11425-1] c76 N74-20329
- Stored charge transistor
[NASA-CASE-NFO-11156-2] c33 N75-31331
- Field effect transistor and method of construction thereof
[NASA-CASE-MFS-23312-1] c33 N76-26394
- FIELD EMISSION**
- Electrode with multiple columnar conductors for limiting field emission current
[NASA-CASE-BEC-10015-2] c10 N72-27246
- FILAMENT WINDING**
- Tool attachment for spreading or moving away loose elements from terminal posts during winding of filamentary elements
[NASA-CASE-XMP-02107] c15 N71-10809
- Fabrication of filament wound propellant tank for cryogenic storage
[NASA-CASE-XLE-03803-2] c15 N71-17651
- Twisted wire or tube superconductor for filament windings
[NASA-CASE-LEW-11015] c26 N73-32571
- Method of making reinforced composite structure
[NASA-CASE-LEW-12619-1] c24 N77-19171
- FILAMENTS**
- Refractory filament series circuitry for radiant heater
[NASA-CASE-XLE-00387] c33 N70-34812
- Controlled diffusion reaction process for masking substrate of twisted multifilament superconductive ribbon
[NASA-CASE-LEW-11726-1] c26 N73-26752
- FILLERS**
- Filling honeycomb matrix with deaerated paste filler
[NASA-CASE-XMS-01108] c15 N69-24322
- FILM COOLING**
- Multislotted film cooled pyrolytic graphite rocket nozzle
[NASA-CASE-INP-04389] c28 N71-20942
- FILMS**
- Apparatus for obtaining isotropic irradiation on film emulsion from parallel radiation source
[NASA-CASE-MFS-20095] c24 N72-11595
- Method and apparatus for measurement of trap density and energy distribution in dielectric films
[NASA-CASE-NFO-13443-1] c76 N76-20994
- FILTERS**
- Development of filter system for control of outgas contamination in vacuum conditions
- using absorbent beds of molecular sieve zeolite, silica gel, and charcoal
[NASA-CASE-MFS-14711] c15 N71-26185
- Heated tungsten filter for removing oxygen impurities from cesium
[NASA-CASE-INP-04262-2] c17 N71-26773
- Centrifugal lyophobic separator
[NASA-CASE-LAR-10194-1] c34 N74-30608
- FINS**
- Thrust and attitude control apparatus using jet nozzle in movable canard surface or fin configuration
[NASA-CASE-XLE-03583] c31 N71-17629
- Deployable flexible ventral fins for use as an emergency spin recovery device in aircraft
[NASA-CASE-LAR-10753-1] c08 N74-30421
- FIRE PREVENTION**
- Hydrogen fire blink detector for high altitude rocket or ground installation
[NASA-CASE-MFS-15063] c14 N72-25412
- Method and apparatus for checking fire detectors
[NASA-CASE-GSC-11600-1] c35 N74-21019
- FIREPROOFING**
- Fireproof potassium silicate coating composition, insoluble in water after application
[NASA-CASE-GSC-10072] c18 N71-14014
- Intumescent paint containing nitrile rubber for fire protection
[NASA-CASE-ABC-10196-1] c18 N73-13562
- Para-benzoquinone dioxime and concentrated mineral acid processed to yield intumescent or fire resistant, heat insulating materials
[NASA-CASE-ABC-10304-1] c18 N73-26572
- Flexible fire retardant polyisocyanate modified neoprene foam --- for thermal protective devices
[NASA-CASE-ABC-10180-1] c27 N74-12814
- Non-flammable elastomeric fiber from a fluorinated elastomer and containing an halogenated flame retardant
[NASA-CASE-MSC-14331-1] c27 N76-24405
- FIRES**
- Device for generating and controlling combustion products for testing of fire detection system
[NASA-CASE-GSC-11095-1] c14 N72-10375
- Device for detecting hydrogen fires onboard high altitude rockets
[NASA-CASE-MFS-13130] c10 N72-17173
- FIRING (IGNITING)**
- Contamination free separation nut eliminating combustion products from ambient surroundings generated by squib firing
[NASA-CASE-XGS-01971] c15 N71-15922
- FSSIONABLE MATERIALS**
- Nuclear gaseous reactor for heating working fluid to high temperatures
[NASA-CASE-XLE-00321] c22 N70-34572
- FITTINGS**
- Design and development of quick release connector
[NASA-CASE-XLA-01141] c15 N71-13789
- Development and characteristics of strainer for flared tube fitting
[NASA-CASE-XLA-05056] c15 N72-11389
- FIXED WINGS**
- Design of supersonic aircraft with novel fixed, swept wing planform
[NASA-CASE-XLA-04451] c02 N71-12243
- FIXTURES**
- Tool for use in lifting pin supported objects
[NASA-CASE-NFO-13157-1] c37 N74-32918
- Apparatus for positioning modular components on a vertical or overhead surface
[NASA-CASE-LAR-11465-1] c37 N76-21554
- FLAME PROBES**
- Flame detector operable in presence of proton radiation
[NASA-CASE-MFS-21577-1] c19 N74-29410
- FLAME RETARDANTS**
- Flame retardant elastomeric compositions
[NASA-CASE-MSC-14331-2] c27 N76-24408
- Flame retardant elastomeric compositions
[NASA-CASE-MSC-14331-3] c27 N76-24409
- Flame-resistant liquid oxygen compatible neoprene rubber composition
[NASA-CASE-KSC-11020-1] c27 N77-23267
- FLAME SPRAYING**
- Flame or plasma spraying for molybdenum coating of carbon or graphite surfaces to prevent oxidative corrosion

- [NASA-CASE-XIA-00302] c15 N71-16077
Modification of polyurethanes with alkyl halide resins, inorganic salts, and encapsulated volatile and reactive halogen for fuel fire control
- [NASA-CASE-ARC-10C98-1] c06 N71-24739
Method of making pressure tight seal for super alloy
- [NASA-CASE-LAR-10170-1] c37 N74-11301
- FLAMES**
Anodizing method for providing metal surfaces with temperature reducing coatings against flames
- [NASA-CASE-XLE-00035] c33 N71-29151
Modulated hydrogen ion flame detector
- [NASA-CASE-ARC-10322-1] c35 N76-18403
- FLAMMABILITY**
Flammability test chamber for testing materials in certain predetermined environments
- [NASA-CASE-KSC-10126] c11 N71-24985
Development of apparatus for testing burning rate and flammability of materials
- [NASA-CASE-XMS-09690] c33 N72-25913
- FLANGES**
Cassegrain antenna subreflector flange for suppressing ground noise and increasing antenna transmitting efficiency
- [NASA-CASE-XNP-00683] c09 N70-35425
Light baffle with oblate hemispheroid surface and shading flange
- [NASA-CASE-NPO-10337] c14 N71-15604
Flanged major modular assembly jig
- [NASA-CASE-MSC-19372-1] c39 N76-31562
- FLAPS (CONTROL SUBPACKS)**
Upper surface, external flow, jet-augmented flap configuration for high wing jet aircraft for noise reduction
- [NASA-CASE-XLA-00087] c02 N70-33332
Assembly for opening flight capsule stabilizing and decelerating flaps with reference to capsule recovery
- [NASA-CASE-XMF-00641] c31 N70-36410
Direct lift control system having flaps with slots adjacent to their leading edge and particularly adapted for lightweight aircraft
- [NASA-CASE-LAR-10249-1] c02 N71-26110
Reversed cowl flap inlet thrust augmentor --- with adjustable airfoil
- [NASA-CASE-ARC-10754-1] c07 N75-24736
- FLARED BODIES**
Development and characteristics of strainer for flared tube fitting
- [NASA-CASE-XLA-05056] c15 N72-11389
- FLAT CONDUCTORS**
Method of making welded electric connector for use with flat conductor cables
- [NASA-CASE-XMF-03498] c15 N71-15986
Shielded flat conductor cable fabricated by electroless and electrolytic plating
- [NASA-CASE-MFS-13687] c09 N71-28691
Shielded flat conductor cable of ribbonlike wires laminates in thin flexible insulation
- [NASA-CASE-MFS-13687-2] c09 N72-22198
Separable flat cable connector with isolated electrical contacts
- [NASA-CASE-MFS-20757] c09 N72-28225
- FLAT PLATES**
Reduced gravity liquid configuration simulator to study propellant behavior in rocket fuel tanks
- [NASA-CASE-XLE-02624] c12 N69-39988
Exponential horn, copper plate, magnetic hammer, and anvil in apparatus for making diamonds
- [NASA-CASE-MFS-20698] c15 N72-20446
Heat transfer device
- [NASA-CASE-MFS-22938-1] c34 N76-18374
Flat-plate heat pipe
- [NASA-CASE-GSC-11998-1] c34 N77-32413
- FLEXIBILITY**
Weatherproof helix antenna
- [NASA-CASE-XKS-08485] c07 N71-19493
Flexible bellows joint shielding sleeve for propellant transfer pipelines
- [NASA-CASE-XNP-01855] c15 N71-28937
Flexible joint for pressurizable garment
- [NASA-CASE-MSC-11072] c54 N74-32546
Adjustable securing base
- [NASA-CASE-MSC-19666-1] c37 N76-31529
- Nozzle extraction process and handmeter for measuring handle
- [NASA-CASE-LAR-12147-1] c27 N77-10198
- FLEXIBLE BODIES**
Flexible backup bar for welding awkwardly shaped structures
- [NASA-CASE-XMF-00722] c15 N70-40204
Characteristics of hermetically sealed electric switch with flexible operating capability
- [NASA-CASE-XNP-09808] c09 N71-12518
Flexible composite membrane structure impervious to extremely reactive chemicals in rocket propellants
- [NASA-CASE-XNP-08837] c18 N71-16210
Development and characteristics of self supporting space vehicle
- [NASA-CASE-XLA-00117] c31 N71-17680
Design and development of flexible tunnel for use by spacecrews in performing extravehicular activities
- [NASA-CASE-MSC-12243-1] c05 N71-24728
Vibration control of flexible bodies in steady accelerating environment
- [NASA-CASE-LAR-10106-1] c15 N71-27169
Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
- [NASA-CASE-XNP-08881] c17 N71-28747
Development of device for simulating cyclic thermal loading of flexible materials by application of mechanical stresses and deformations
- [NASA-CASE-LAR-10270-1] c32 N72-25877
Deployable flexible ventral fins for use as an emergency spin recovery device in aircraft
- [NASA-CASE-LAR-10753-1] c08 N74-30421
Internally supported flexible duct joint --- device for conducting fluids in high pressure systems
- [NASA-CASE-MFS-19193-1] c37 N75-19686
- FLEXIBLE WINGS**
Aeroflexible wing structure with air scoop for inflating stiffeners with ram air
- [NASA-CASE-XIA-06095] c01 N69-39981
Deployment system for flexible wing with rigid superstructure
- [NASA-CASE-XLA-01220] c02 N70-41863
Development and characteristics of control system for flexible wings
- [NASA-CASE-XLA-06958] c02 N71-11038
- FLEXING**
Two degree inverted flexure from single block of material
- [NASA-CASE-ARC-10345-1] c15 N73-12488
- FLIGHT**
Flow meter for measuring stagnation pressure in boundary layer around high speed flight vehicle
- [NASA-CASE-XPR-02007] c12 N71-24692
- FLIGHT ALTITUDE**
Surface based altitude measuring system for accurately measuring altitude of airborne vehicle
- [NASA-CASE-ERC-10412-1] c09 N73-12211
Terminal guidance system --- for guiding aircraft into preselected altitude and/or heading at terminal point
- [NASA-CASE-FRC-10049-1] c04 N74-13420
- FLIGHT CONTROL**
Aircraft indicator for pilot control of takeoff roll, climbout path and verticle flight path in poor visibility conditions
- [NASA-CASE-XLA-00487] c14 N70-40157
Two axis flight controller with potentiometer control shafts directly coupled to rotatable ball members
- [NASA-CASE-XPR-04104] c03 N70-42073
Development of aircraft control system with high performance electrically controlled and mechanically operated hydraulic valves for precise flight operation
- [NASA-CASE-XAC-00048] c02 N71-29128
Development of flight simulator system to show position of joystick displacement
- [NASA-CASE-NPO-11497] c08 N73-25206
Solid state controller three axes controller
- [NASA-CASE-MSC-12394-1] c08 N74-10942
G-load measuring and indicator apparatus --- for aircraft

- [NASA-CASE-ARC-10806] c06 N74-27872
Integrated lift/drag controller for aircraft
[NASA-CASE-ARC-10456-1] c05 N75-12930
Servo valve
[NASA-CASE-LAR-11643-1] c37 N75-13268
Deploy/release system --- model aircraft flight
control
[NASA-CASE-LAR-11575-1] c02 N76-16014
- FLIGHT CREWS**
Survival couch for aircraft or spacecraft crews
[NASA-CASE-XLA-00118] c05 N70-33285
- FLIGHT INSTRUMENTS**
Crosswind landing gear position indicator
[NASA-CASE-LAR-11941-1] c06 N77-20098
- FLIGHT RECORDERS**
Event recorder with constant speed motor which
rotates recording disk
[NASA-CASE-XLA-01832] c14 N71-21006
- FLIGHT SAFETY**
Aerial capsule emergency separation device using
jettisonable towers
[NASA-CASE-XLA-00115] c03 N70-33343
Development and characteristics of electronic
signalling system and data processing
equipment for warning systems to avoid midair
collisions between aircraft
[NASA-CASE-LAR-10717-1] c21 N73-30641
- FLIGHT SIMULATION**
Lunar landing flight research vehicle
[NASA-CASE-XFR-00929] c31 N70-34966
Television simulation for aircraft and space
flight
[NASA-CASE-XFR-03107] c09 N71-19449
Electrical circuit selection device for
simulating stage separation of flight vehicle
[NASA-CASE-XKS-04631] c10 N71-23663
- FLIGHT SIMULATORS**
Centrifuge mounted motion simulator with
elevator mechanism
[NASA-CASE-XAC-00399] c11 N70-34815
Table structure and rotating magnet system
simulating gravitational forces on spacecraft
and displaying trajectories between Earth,
Venus, and Mercury
[NASA-CASE-XMP-00708] c14 N70-35394
Wind tunnel test section for simulating high
Reynolds number over transonic speed range
[NASA-CASE-MFS-20509] c11 N72-17183
Development of flight simulator system to show
position of joystick displacement
[NASA-CASE-NPO-11497] c08 N73-25206
Apparatus for applying simulator g-forces to an
arm of an aircraft simulator pilot
[NASA-CASE-LAR-10550-1] c09 N74-30597
Full color hybrid display for aircraft simulators
[NASA-CASE-ARC-10903-1] c09 N76-10148
Vehicle simulator binocular multiplanar visual
display system
[NASA-CASE-ARC-10808-1] c09 N76-24280
A seat cushion to provide realistic acceleration
cues for aircraft simulator pilots
[NASA-CASE-LAR-12149-1] c54 N77-31787
- FLIGHT TESTS**
Device for measuring drag forces in flight tests
[NASA-CASE-XLA-00113] c14 N70-33386
- FLIGHT VEHICLES**
Construction of leading edges of surfaces for
aerial vehicles performing from subsonic to
above transonic speeds
[NASA-CASE-XLA-01486] c01 N71-23497
Electro-optical attitude sensing device for
landing approach of flight vehicle
[NASA-CASE-XMS-01994-1] c14 N72-17326
Design and development of active control system
for air cushion vehicle to reduce or eliminate
effects of excessive vertical vibratory
acceleration
[NASA-CASE-LAR-10531-1] c02 N73-13023
- FLIP-FLOPS**
Bistable multivibrator circuits operating at
high speed and low power dissipation
[NASA-CASE-XGS-00623] c10 N71-15910
Stepping motor control apparatus exciting
windings in proper time sequence to cause
motor to rotate in either direction
[NASA-CASE-GSC-10366-1] c10 N71-18772
Interrogator and current driver circuit for
combination with transistor flip-flop circuit
[NASA-CASE-XCS-03058] c10 N71-19547
- FLOATING**
Floating baffle for tank drain
[NASA-CASE-RSC-10639] c15 N73-26472
Modification of one man life raft
[NASA-CASE-LAR-10241-1] c54 N74-14845
- FLOATS**
Magnetically centered liquid column float
[NASA-CASE-XAC-00030] c14 N70-34820
- FLOTATION**
Development and characteristics of rescue litter
with inflatable flotation device for water
rescue application
[NASA-CASE-XMS-04170] c05 N71-22748
- FLOW DIRECTION INDICATORS**
Electric circuit for reversing direction of
current flow
[NASA-CASE-INP-00952] c10 N71-23271
Flow angle sensor and remote readout system for
use with cryogenic fluids
[NASA-CASE-XLE-04503] c14 N71-24864
- FLOW DISTRIBUTION**
Multiple orifice fluid flow control valve to
provide different flow patterns
[NASA-CASE-ERC-10208] c15 N70-10867
Photographing surface flow patterns on wind
tunnel test models
[NASA-CASE-XLA-01353] c14 N70-41366
Color photointerpretation of interference colors
reflected from thin film oil-coated components
in moving gases for gas flow visualization
[NASA-CASE-INP-01779] c12 N71-20815
Dual wavelength scanning Doppler velocimeter ---
without perturbation of flow fields
[NASA-CASE-ARC-10637-1] c35 N75-16783
Controlled separation combustor --- airflow
distribution in gas turbine engines
[NASA-CASE-LEW-11593-1] c20 N76-14190
- FLOW MEASUREMENT**
Collapsible flow test device for obstructed
passages
[NASA-CASE-XMS-04917] c14 N69-24257
Simulated fuel assembly-type flow measurement
apparatus for coolant flow in reactor core
[NASA-CASE-XLE-00724] c14 N70-34669
Mass flow meter containing beta source for
measuring nonpolar liquid flow
[NASA-CASE-MFS-20485] c14 N72-11365
Instrument for measuring magnitude and direction
of flow velocity in flow field
[NASA-CASE-LAR-10855-1] c14 N73-13415
Flow measuring apparatus
[NASA-CASE-LEW-12078-1] c35 N75-30503
Method for making a hot wire anemometer and
product thereof
[NASA-CASE-ARC-10900-1] c35 N77-24454
- FLOW REGULATORS**
Antibacklash circuit for hydraulic drive system
[NASA-CASE-XNP-01020] c03 N71-12260
Tubular flow restrictor for gas flow control in
pipeline
[NASA-CASE-NPO-10117] c15 N71-15608
Fluid flow control valve for regulating fluids
in molecular quantities
[NASA-CASE-XLE-00703] c15 N71-15967
Control of gas flow from pressurized vessel by
thermal expansion of metal plug
[NASA-CASE-NPO-10298] c12 N71-17661
Semitoroidal diaphragm cavitating flow control
valve
[NASA-CASE-XNP-09704] c12 N71-18615
Describing device for changing flow rate of
fluid in duct in response to change in
temperature
[NASA-CASE-MFS-14259] c15 N71-19213
Pneumatic servoamplifier for controlling flow
regulation
[NASA-CASE-MSC-12121-1] c15 N71-27147
Gas flow control device, including housing and
input port
[NASA-CASE-NPO-11479] c15 N73-13462
Flow compensating pressure regulator --- for
ophthalmic applications
[NASA-CASE-LEW-12718-1] c35 N77-20408
Pressure modulating valve
[NASA-CASE-MSC-14905-1] c37 N77-28487
- FLOW STABILITY**
Detonation reaction engine comprising outer
housing enclosing pair of inner walls for
continuous flow

- [NASA-CASE-XMF-06926] c28 N71-22983
Apparatus for establishing flow of a fluid mass
having a known velocity
[NASA-CASE-MFS-21424-1] c34 N74-27730
- FLOW VELOCITY**
- Continuous variation of propellant flow and
thrust by application of liquid foam flow
theory to injection orifice
[NASA-CASE-XLE-00177] c28 N70-40367
Measuring density of single and two-phase
cryogenic fluids in rocket fuel tanks
[NASA-CASE-XLE-00688] c14 N70-41330
Device for adding water to high velocity exhaust
jets to reduce velocity, noise, and temperature
[NASA-CASE-XMF-01813] c28 N70-41582
Positive displacement flowmeter for measuring
extremely low flows of fluid with self
calibrating features
[NASA-CASE-XMF-02822] c14 N70-41994
Zeta potential flowmeter for measuring very slow
to very high flows
[NASA-CASE-XMF-06509] c14 N71-23226
Device for simultaneously determining density,
velocity, and temperature of streaming gas
[NASA-CASE-XLA-03375] c16 N71-24074
Doppler shifted laser beam as fluid velocity
sensor
[NASA-CASE-XAC-10770-1] c16 N71-24828
Flowmeters for sensing low fluid flow rate and
pressure for application to respiration rate
studies
[NASA-CASE-FRC-10022] c12 N71-26546
Force balanced throttle valve for fuel control
in rocket engines
[NASA-CASE-NPO-10808] c15 N71-27432
Flow rate switch for detecting variations in
fluid flow velocity through conduits of
pressurized systems
[NASA-CASE-NPO-10722] c09 N72-20199
Instrument for measuring magnitude and direction
of flow velocity in flow field
[NASA-CASE-LAR-10855-1] c14 N73-13415
Apparatus for establishing flow of a fluid mass
having a known velocity
[NASA-CASE-MFS-21424-1] c34 N74-27730
Wind tunnel flow generation section
[NASA-CASE-ARC-10710-1] c09 N75-12969
Combined dual scatter, local oscillator laser
Doppler velocimeter
[NASA-CASE-ARC-10642-1] c36 N76-14447
System for measuring three fluctuating velocity
components in a turbulently flowing fluid
[NASA-CASE-ARC-10974-1] c34 N77-27345
- FLOW VISUALIZATION**
- Method and apparatus for measuring shock layer
radiation distribution about high velocity
objects
[NASA-CASE-XAC-02970] c14 N69-39896
Color photointerpretation of interference colors
reflected from thin film oil-coated components
in moving gases for gas flow visualization
[NASA-CASE-XMF-01779] c12 N71-20815
- FLOWMETERS**
- Collapsible flow test device for obstructed
passages
[NASA-CASE-XMS-04917] c14 N69-24257
Simulated fuel assembly-type flow measurement
apparatus for coolant flow in reactor core
[NASA-CASE-XLE-00724] c14 N70-34669
Positive displacement flowmeter for measuring
extremely low flows of fluid with self
calibrating features
[NASA-CASE-XMF-02822] c14 N70-41994
Heated element sensor for fluid flow detection
in thermal conductive conduit with adaptive
means to determine flow rate and direction
[NASA-CASE-MSC-12084-1] c12 N71-17569
Describing laser Doppler velocimeter for
measuring mean velocity and turbulence of
fluid flow
[NASA-CASE-MFS-20386] c21 N71-19212
Zeta potential flowmeter for measuring very slow
to very high flows
[NASA-CASE-XNP-06509] c14 N71-23226
Flow meter for measuring stagnation pressure in
boundary layer around high speed flight vehicle
[NASA-CASE-XFR-02007] c12 N71-24692
Doppler shifted laser beam as fluid velocity
sensor
- [NASA-CASE-XAC-10770-1] c16 N71-24828
Flowmeters for sensing low fluid flow rate and
pressure for application to respiration rate
studies
[NASA-CASE-FRC-10022] c12 N71-26546
Mass flow meter containing beta source for
measuring nonpolar liquid flow
[NASA-CASE-MFS-20485] c14 N72-11365
Respiratory analysis system to determine gas
flow rate and frequency of respiration and
expiration cycles in real time
[NASA-CASE-MSC-13436-1] c05 N73-32015
Low power electromagnetic flowmeter system
producing zero output signal for zero flow
[NASA-CASE-ARC-10362-1] c14 N73-32326
Electromagnetic flow rate meter --- for liquid
metals
[NASA-CASE-LEW-10981-1] c35 N74-21018
Leak detector
[NASA-CASE-MFS-21761-1] c35 N75-15931
Flow separation detector
[NASA-CASE-ARC-11046-1] c35 N76-28535
System for measuring three fluctuating velocity
components in a turbulently flowing fluid
[NASA-CASE-ARC-10974-1] c34 N77-27345
- FLUID AMPLIFIERS**
- Fluid jet amplifier with fluid from jet nozzle
deflected by inlet pressure
[NASA-CASE-XLE-03512] c12 N69-21466
Multiple vortex amplifier system as fluid valve
[NASA-CASE-XMF-04709] c15 N71-15609
Shear modulated fluid amplifier of high pressure
hydraulic vortex amplifier type
[NASA-CASE-MFS-10412] c12 N71-17578
Development of vortex fluid amplifier for
throttling rocket exhaust
[NASA-CASE-LEW-10374-1] c28 N73-13773
Fluid pressure amplifier and system
[NASA-CASE-LAR-10868-1] c33 N74-11050
- FLUID FILMS**
- Journal bearings --- for lubricant films
[NASA-CASE-LEW-11076-1] c37 N74-21061
Fluid journal bearings
[NASA-CASE-LEW-11076-4] c37 N76-15461
Fluid seal for rotating shafts
[NASA-CASE-LEW-11676-1] c37 N76-22541
- FLUID FILTERS**
- Absorbent apparatus for separating gas from
liquid-gas stream used in environmental
control under zero gravity conditions
[NASA-CASE-XMS-01492] c05 N70-41297
Compact high pressure filter for rocket fuel lines
[NASA-CASE-XNP-00732] c28 N70-41447
Development of liquid separating system using
capillary device connected to flexible bladder
storage chamber
[NASA-CASE-XMS-13052] c14 N71-20427
Fluid control apparatus and method
[NASA-CASE-LAR-11110-1] c34 N75-26282
Filter regeneration systems --- a system for
regenerating a system filter in a fluid flow
line
[NASA-CASE-MSC-14273-1] c34 N75-33342
Quick disconnect filter coupling
[NASA-CASE-MFS-22323-1] c37 N76-14463
- FLUID FLOW**
- Fluid jet amplifier with fluid from jet nozzle
deflected by inlet pressure
[NASA-CASE-XLE-03512] c12 N69-21466
Pneumatic system for cyclic control of fluid
flow in pneumatic device
[NASA-CASE-XMS-04843] c03 N69-21469
Multiple orifice fluid flow control valve to
provide different flow patterns
[NASA-CASE-FRC-10208] c15 N70-10867
Conical valve plug for use with reactive
cryogenic fluids
[NASA-CASE-XLE-00715] c15 N70-34859
Pressure regulating system with high pressure
fluid source, adapted to maintain constant
downstream pressure
[NASA-CASE-XNP-00450] c15 N70-38603
Antiflutter check valve for use with high
pressure fluid flow
[NASA-CASE-XNP-01152] c15 N70-41811
Inductive liquid level detection system
[NASA-CASE-XLE-01609] c14 N71-10500
Multiple vortex amplifier system as fluid valve
[NASA-CASE-XMF-04709] c15 N71-15609

- Heated element sensor for fluid flow detection in thermal conductive conduit with adaptive means to determine flow rate and direction
[NASA-CASE-HSC-12084-1] c12 N71-17569
- Throttle valve for regulating fluid flow volume
[NASA-CASE-XNP-09698] c15 N71-18580
- Photometric flow meter with comparator reference means
[NASA-CASE-XGS-01331] c14 N71-22996
- Combination pressure transducer-calibrator assembly for measuring fluid
[NASA-CASE-XNP-01660] c14 N71-23036
- Valve assembly for controlling simultaneously more than one fluid flow, and having stable qualities under loads
[NASA-CASE-XMS-05890] c09 N71-23191
- Flowmeters for sensing low fluid flow rate and pressure for application to respiration rate studies
[NASA-CASE-FBC-10022] c12 N71-26546
- Control valve for switching main stream of fluid from one stable position to another by means of electrohydrodynamic forces
[NASA-CASE-NPO-10416] c12 N71-27332
- Fluid control jet amplifiers
[NASA-CASE-XLE-09341] c12 N71-28741
- Mass flow meter containing beta source for measuring nonpolar liquid flow
[NASA-CASE-NFS-20485] c14 N72-11365
- Flow rate switch for detecting variations in fluid flow velocity through conduits of pressurized systems
[NASA-CASE-NPO-10722] c09 N72-20199
- Torsional disconnect device for releasably coupling distal ends of fluid conduits
[NASA-CASE-NPO-10704] c15 N72-20445
- Capacitive tank gaging device for monitoring one constituent of two phase fluid by sensing dielectric constant
[NASA-CASE-NFS-21629] c14 N72-22442
- Transferring liquid nitrogen through vacuum chamber to cryopanel
[NASA-CASE-LAR-10031] c15 N72-22484
- Design and development of device to prevent geysering during convective circulation of cryogenic fluids
[NASA-CASE-HSC-10615] c15 N73-12486
- Design and development of thermomechanical pump for transmitting warming fluid through fluid circuit to control temperature of spacecraft instrumentation
[NASA-CASE-NPO-11417] c15 N73-24513
- Flow control valve --- for high temperature fluids
[NASA-CASE-NPO-11951-1] c37 N74-21065
- Apparatus for establishing flow of a fluid mass having a known velocity
[NASA-CASE-NFS-21424-1] c34 N74-27730
- Internally supported flexible duct joint --- device for conducting fluids in high pressure systems
[NASA-CASE-NFS-19193-1] c37 N75-19686
- Flow measuring apparatus
[NASA-CASE-LEW-12078-1] c35 N75-30503
- Filter regeneration systems --- a system for regenerating a system filter in a fluid flow line
[NASA-CASE-HSC-14273-1] c34 N75-33342
- Combined dual scatter, local oscillator laser Doppler velocimeter
[NASA-CASE-ABC-10642-1] c36 N76-14447
- Externally supported internally stabilized flexible duct joint
[NASA-CASE-NFS-19194-1] c37 N76-14460
- Fluid valve assembly
[NASA-CASE-HSC-12731-1] c37 N76-26511
- Positive isolation disconnect
[NASA-CASE-HSC-16043-1] c37 N77-15397
- Vortex generator for controlling the dispersion of effluents in a flowing liquid
[NASA-CASE-LAR-12045-1] c34 N77-24423
- Pseudo-backscatter laser Doppler velocimeter employing antiparallel-reflector in the forward direction
[NASA-CASE-ABC-10970-1] c36 N77-25501
- Accumulator
[NASA-CASE-NFS-19287-1] c34 N77-30399
- FLUID INJECTION**
Solid propellant ignition with hypergolic fluid injected to predetermined portions of propellant
[NASA-CASE-XLE-00207] c28 N70-33375
- Method for igniting solid propellant rocket motors by injecting hypergolic fluids
[NASA-CASE-XLE-01988] c27 N71-15634
- Constructing fluid spike nozzle to eliminate heat transfer and high temperature problems inherent in physical spikes
[NASA-CASE-XGS-01143] c31 N71-15647
- Method and apparatus for producing fine particles in cryogenic liquid bath for gelled rocket propellants
[NASA-CASE-NPO-10250] c23 N71-16214
- Fluid transferring system design for purging toxic, corrosive, or noxious fluids and fumes from materials handling equipment for cleansing and accident prevention
[NASA-CASE-XMS-01905] c12 N71-21089
- Tertiary flow injection system for thrust vectoring of propulsive nozzle flow
[NASA-CASE-NFS-20831] c28 N71-29153
- Programmable physiological infusion
[NASA-CASE-ABC-10447-1] c52 N74-22771
- FLUID JETS**
Directed fluid stream for propeller blade loading control
[NASA-CASE-XAC-00139] c02 N70-34856
- FLUID LOGIC**
Logic AND gate for fluid circuits
[NASA-CASE-XLA-07391] c12 N71-17579
- FLUID MECHANICS**
Fluid leakage detection system with automatic monitoring capability
[NASA-CASE-LAR-10323-1] c12 N71-17573
- Development and characteristics of parallel plate viscometer for determination of absolute viscosity of liquids and viscoelastic materials
[NASA-CASE-NPO-11387] c14 N73-14429
- FLUID POWER**
Fluid power transmission and gas bearing system
[NASA-CASE-XMS-01445] c12 N71-16031
- Low friction gas bearing system for fluid power transmission to bearing-supported payload
[NASA-CASE-FBC-10097] c15 N71-28465
- FLUID ROTOR GYROSCOPES**
Piezoelectric pump for supplying fluid at high frequencies to gyroscope fluid suspension system
[NASA-CASE-XNP-05429] c26 N71-21824
- FLUID SWITCHING ELEMENTS**
Two phase fluid pressurization system for propellant tank
[NASA-CASE-HSC-12390] c27 N71-29155
- FLUIDIC CIRCUITS**
Using molds for fabricating individual fluid circuit components
[NASA-CASE-XLA-07829] c15 N72-16329
- Flow measuring apparatus
[NASA-CASE-LEW-12078-1] c35 N75-30503
- FLUIDICS**
Fluidic-thermochromic display device
[NASA-CASE-FBC-10031] c12 N71-18603
- Plasma-fluidic hybrid display system combining high brightness and memory characteristics
[NASA-CASE-FBC-10100] c09 N71-33519
- Continuous gas flow control by fluidic proportional thruster system
[NASA-CASE-ABC-10106-1] c28 N72-22769
- Fluid pressure amplifier and system
[NASA-CASE-LAR-10868-1] c33 N74-11050
- FLUIDS**
Automated fluid chemical analyzer for microchemical analysis of small quantities of liquids by use of selected reagents and analyzer units
[NASA-CASE-XNP-09451] c06 N71-26754
- Detection of bacteria in biological fluids and foods
[NASA-CASE-GSC-11533-1] c14 N73-13435
- Fluid polydimethylsiloxane resin with low outgassing properties in cured state
[NASA-CASE-GSC-11358-1] c06 N73-26100
- Apparatus for measuring a sorbate dispersed in a fluid stream
[NASA-CASE-ABC-10896-1] c34 N75-32389
- Automatic fluid dispenser
[NASA-CASE-ABC-10820-1] c54 N75-32766
- Fluid mass sensor for a zero gravity environment
[NASA-CASE-HSC-14653-1] c35 N77-19385
- FLUORESCENCE**
Spectrophotofluorometer with 3-dimensional

- display to identify fluorescence spectra of carcinogenic and noncarcinogenic hydrocarbons
[NASA-CASE-XGS-01231] c14 N70-41676
- Sealed fluorescent tube light unit capable of connection with other units to form string of work lights
[NASA-CASE-XKS-05932] c09 N71-26787
- Chromato-fluorographic drug detector --- device for detecting and recording fluorescent properties of materials
[NASA-CASE-ARC-10633-1] c25 N74-26947
- Fluorescence detector for monitoring atmospheric pollutants
[NASA-CASE-NPO-13231-1] c45 N75-27585
- FLUORIDES**
- Self lubricating fluoride-metal composite materials for outer space applications
[NASA-CASE-XLE-08511] c18 N71-23710
- Development of fluoride coating to prevent oxidation of beryllium surfaces at elevated temperatures
[NASA-CASE-LEW-10327] c17 N71-33408
- Perfluoro polyether acyl fluorides
[NASA-CASE-NPO-1C765] c06 N72-20121
- FLUORINATION**
- Fluorinated polyurethanes produced by reacting hydroxy terminated perfluoro polyether with diisocyanate
[NASA-CASE-NPO-10767-2] c06 N72-27151
- Fluorinated esters of polycarboxylic acid and lubricating compositions for use at extreme temperature
[NASA-CASE-MPS-21040-1] c06 N73-30098
- FLUORINE**
- Reaction of polyperfluoropolyenes with fluorine to produce saturated polymer chain or create reactive sites on chain
[NASA-CASE-NPO-10862] c06 N72-22107
- FLUORO COMPOUNDS**
- Synthesis of polyfluorobutadiene by polymerization of perfluorobutadiene with diisopropyl peroxydicarbonate
[NASA-CASE-NFO-1C863] c06 N70-11251
- Low pressure perfluorobutadiene polymerization with peroxide catalysts
[NASA-CASE-NPO-10447] c06 N70-11252
- Preparation of fluorohydroxy ethers by reacting fluoroalkylene oxides with alkali salt of polyfluoroalkylene diol
[NASA-CASE-MFS-10507] c06 N73-30101
- Preparation of fluorinated polyethers from 2-hydro-perhaloisopropyl alcohols
[NASA-CASE-MFS-11492] c06 N73-30102
- Chemical and elastic properties of fluorinated polyurethanes
[NASA-CASE-NPO-1C767-1] c06 N73-33076
- Utilization of oxygen difluoride for syntheses of fluorocyclomers
[NASA-CASE-NFO-12061-1] c27 N76-16228
- FLUOROCARBONS**
- Electrically conductive fluorocarbon polymers
[NASA-CASE-XLE-06774-2] c06 N72-25150
- FLUTTER**
- Antiflutter check valve for use with high pressure fluid flow
[NASA-CASE-XNP-01152] c15 N70-41811
- Development of aerodynamic control system to control flutter over large range of oscillatory frequencies using stability augmentation techniques
[NASA-CASE-LAR-10682-1] c02 N73-26004
- FLUX (RATE)**
- Solid state device for mapping flux and power in nuclear reactor cores
[NASA-CASE-XLE-00301] c14 N70-36808
- Fluxgate magnetometer for measuring magnetic field along two axes using one sensor
[NASA-CASE-GSC-10441-1] c14 N71-27325
- FLUX DENSITY**
- Particle beam power density detection and measurement apparatus
[NASA-CASE-XLE-00243] c14 N70-38602
- FLUXES**
- Hydrazine monoperfluoro alkanoate solder flux leaving corrosion resistant coating, for metals such as copper
[NASA-CASE-XNP-03459-2] c18 N71-15688
- Metal soldering with hydrazine monoperfluoro alkanoate for corrosion resistant coatings
[NASA-CASE-XNP-03459] c15 N71-21078
- FLYWHEELS**
- An improved rotatable mass for a flywheel
[NASA-CASE-MFS-23051-1] c37 N76-13500
- Safety flywheel
[NASA-CASE-HQN-10888-1] c37 N77-22484
- FOAMS**
- Plastic foam generator for space vehicle instrument payload package flotation in water landing
[NASA-CASE-XLA-00838] c03 N70-36778
- Continuous variation of propellant flow and thrust by application of liquid foam flow theory to injection orifice
[NASA-CASE-XLE-00177] c28 N70-40367
- Development of foam insulation for filament wound cryogenic storage tank
[NASA-CASE-XLE-03803] c15 N71-23816
- Carboxyl terminated polyester prepolymers and foams produced from prepolymers and materials
[NASA-CASE-NFO-10596] c06 N71-25929
- Storage stable, thermally activated foaming compositions for erecting and rigidizing mechanisms of thin sheet solar collectors
[NASA-CASE-LAR-10373-1] c18 N71-26155
- Method of making solid propellant rocket motor having reliable high altitude capabilities, long shelf life, and capable of firing with nozzle closure with foamed plastic permanent mandrel
[NASA-CASE-XLA-04126] c28 N71-26779
- Foam insulation thickness measuring and injection device for spacecraft applications
[NASA-CASE-MFS-20261] c14 N71-27005
- Description of method for making homogeneous foamed materials in weightless environment using materials having different physical properties
[NASA-CASE-XNP-09902] c15 N72-11387
- Polyimide foam for the thermal insulation and fire protection
[NASA-CASE-ARC-10464-1] c27 N74-12812
- Intumescent composition, foamed product prepared therewith and process for making same
[NASA-CASE-ARC-10304-2] c27 N74-27037
- Ceramic fiber insulating material and methods of producing same --- product development of foams for thermal insulation
[NASA-CASE-MSC-14795-1] c27 N76-15314
- FOCUSING**
- X ray collimating structure for focusing radiation directly onto detector
[NASA-CASE-XHQ-04106] c14 N70-40240
- Apertured electrode focusing system for ion sources with nonuniform plasma density
[NASA-CASE-XNP-03332] c09 N71-10618
- Development and characteristics of Petzval type objective including field shaping lens for focusing light of specified wavelength band on curved photoreceptor
[NASA-CASE-GSC-10700] c23 N71-30027
- Absolute focus locking device for microscopes to maintain set focus for extended time period
[NASA-CASE-LAR-10184] c14 N72-22445
- Electron beam controller --- using magnetic field to refocus spent electron beam in microwave oscillator tube
[NASA-CASE-LEW-11617-1] c33 N74-10195
- Automatic focus control for facsimile cameras
[NASA-CASE-LAR-11213-1] c35 N75-15014
- Multiplate focusing collimator --- for scanning small near radiation sources
[NASA-CASE-MFS-20932-1] c35 N75-19616
- Magnifying image intensifier
[NASA-CASE-GSC-12010-1] c33 N76-23482
- FOG**
- Anti-fog composition --- for prevention of fogging on surfaces such as space helmet visors and windshields
[NASA-CASE-MSC-13530-2] c23 N75-14834
- FOILS (MATERIALS)**
- Foil seal between parts moving relative to each other
[NASA-CASE-XLE-05130] c15 N69-21362
- Method of making an insulation foil
[NASA-CASE-LEW-11484-1] c24 N75-33181
- FOLDING**
- Characteristics of device for folding thin flexible sheets into compact configuration

- [NASA-CASE-XLA-00137] c15 N70-33180
- FOLDING STRUCTURES**
- Lenticular vehicle with foldable aerodynamic control flaps and reaction jets for operation above and within earth's atmosphere [NASA-CASE-IGS-00260] c31 N70-37924
- Collapsible, space erectable loop antenna system for space vehicle [NASA-CASE-XMF-00437] c07 N70-40202
- Unfolding boom assembly with knuckle joints for positioning equipment for spacecraft [NASA-CASE-IGS-00938] c32 N70-41367
- Foldable conduit capable of springing back as self erecting structural member [NASA-CASE-XLE-00620] c32 N70-41579
- Foldable, double cone and parabolic reflector system for solar ray concentration [NASA-CASE-XLA-04622] c03 N70-41580
- Method for deployment of flexible wing glider from space vehicle with minimum impact and loading [NASA-CASE-XMS-00907] c02 N70-41630
- Development and characteristics of variable sweep wing control system for supersonic aircraft [NASA-CASE-XIA-03659] c02 N71-11041
- Hydraulic actuator design for space deployment of heat radiators [NASA-CASE-MSC-11817-1] c15 N71-26611
- Apparatus and method of assembling building blocks by folding pre-cut flat sheets of material during on-site construction [NASA-CASE-MSC-12233-1] c15 N72-25454
- Folding structure fabricated of rigid panels [NASA-CASE-XHQ-02146] c18 N75-27040
- Variable dihedral shuttle orbiter [NASA-CASE-LAR-10706-2] c05 N77-31132
- FOOD**
- Detection of bacteria in biological fluids and foods [NASA-CASE-GSC-11533-1] c14 N73-13435
- FORCE**
- Electromechanical actuator for producing mechanical force and/or action in response to electrical signals [NASA-CASE-NFO-11738-1] c09 N73-30185
- FORCE DISTRIBUTION**
- Device for handling heavy loads by distributing forces [NASA-CASE-INP-04969] c11 N69-27466
- Development of two force component measuring device [NASA-CASE-XAC-04886-1] c14 N71-20439
- Tensile strength testing device having pulley guides for exerting multiple forces on test specimen [NASA-CASE-INP-05634] c15 N71-24834
- Development and characteristics of device for indicating and recording magnitude of force applied in axial direction [NASA-CASE-MSC-15626-1] c14 N72-25411
- Variable direction force coupler for transmitting force along selectable curve path [NASA-CASE-MFS-20317] c15 N73-13463
- Subminiature insertable force transducer --- including a strain gage to measure forces in muscles [NASA-CASE-NFO-13423-1] c33 N75-31329
- FORMAT**
- Digital data reformatter/deserializer [NASA-CASE-NFO-13676-1] c60 N77-24781
- FOURIER**
- Preparation of polyurethane polymer by reacting hydroxy polyformal with organic diisocyanate [NASA-CASE-NFO-10509] c06 N73-30103
- FORMING TECHNIQUES**
- Apparatus for forming wire grids for electric strain gages [NASA-CASE-XLE-00023] c15 N70-33330
- Hot forming of plastic sheets [NASA-CASE-XMS-05516] c15 N71-17803
- Forming tubes from long thin flat metal strips [NASA-CASE-IGS-04175] c15 N71-18579
- Portable magnetomotive hammer for metal working [NASA-CASE-INP-03793] c15 N71-24833
- Forming mold for polishing and machining curved solar magnesium reflector with reinforcing ribs [NASA-CASE-XLE-08917-2] c15 N71-24836
- Heat treatment and tooling for forming shapes from thermosetting honeycomb core sheets [NASA-CASE-NFO-11036] c15 N72-24522
- Method of heat treating a formed powder product material [NASA-CASE-LEW-10805-3] c26 N74-10521
- Molding apparatus --- for thermosetting plastic compositions [NASA-CASE-IAR-10489-2] c31 N74-32920
- Process for making sheets with parallel pores of uniform size [NASA-CASE-GSC-10984-1] c37 N75-26371
- Drilled ball bearing with a one piece anti-tipping cage assembly [NASA-CASE-LEW-11925-1] c37 N75-31446
- Apparatus for forming dished ion thruster grids [NASA-CASE-LEW-11694-2] c37 N76-14461
- Method of forming metal hydride films [NASA-CASE-LEW-12083-1] c26 N76-18262
- Acoustic energy shaping [NASA-CASE-NFO-13802-1] c71 N76-18886
- FORMULATIONS**
- Flame retardant elastomeric compositions [NASA-CASE-MSC-14331-2] c27 N76-24408
- Flame retardant elastomeric compositions [NASA-CASE-MSC-14331-3] c27 N76-24409
- FORWARD SCATTERING**
- Forward-scatter polarimeter for determining the gaseous depolarization factor in the presence of polluting polydispersed particles [NASA-CASE-NFO-13756-1] c35 N76-14434
- FOUNDATIONS**
- Base support for expansible and contractible coupling between two members [NASA-CASE-NFO-11059] c15 N72-17454
- Adjustable securing base [NASA-CASE-MSC-19666-1] c37 N76-31529
- FOURIER TRANSFORMATION**
- Photographic film restoration system using Fourier transformation lenses and spatial filter [NASA-CASE-MSC-12448-1] c14 N72-20394
- Continuous Fourier transform method and apparatus --- for the analysis of simultaneous analog signal components [NASA-CASE-ARC-10466-1] c60 N75-13539
- FRACTIONATION**
- Purification apparatus for vaporization and fractional distillation of liquids [NASA-CASE-INP-08124] c15 N71-27184
- FRACTURE MECHANICS**
- Apparatus for testing metallic and nonmetallic beams or rods by bending at high temperatures in vacuum or inert atmosphere [NASA-CASE-XLE-01300] c15 N70-41993
- FRACTURE STRENGTH**
- High toughness-high strength iron alloy [NASA-CASE-LEW-12542-1] c26 N77-24254
- FRAMES**
- Shock absorbing articulated multiple couch assembly [NASA-CASE-MSC-11253] c05 N71-12343
- Pliable frame for sunglasses in emergency survival kits [NASA-CASE-XMS-06064] c05 N71-23096
- Expandable space frames with high expansion to collapse ratio [NASA-CASE-ERC-10365-1] c31 N73-32749
- FRAMING CAMERAS**
- High speed photo-optical time recorder for indicating time at exposure of each frame of high speed movie camera film [NASA-CASE-KSC-10294] c14 N72-18411
- FREE FLIGHT TEST APPARATUS**
- Hydraulic support equipment for full scale dynamic testing of large rocket vehicle under free flight conditions [NASA-CASE-INP-01772] c11 N70-41677
- Hydraulic support apparatus for dynamic testing of space vehicles under near-free flight conditions [NASA-CASE-INP-03248] c11 N71-10604
- Free flight suspension system for use with aircraft models in wind tunnel tests [NASA-CASE-XLA-00939] c11 N71-15926
- FREEZE DRYING**
- Rice preparation process consisting of cooking, two freezing-thawing cycles, and then freeze drying [NASA-CASE-MSC-13540-1] c05 N72-33096

- FREEZING**
System for and method of freezing biological tissue
[NASA-CASF-GSC-12173-1] c52 N77-27693
- FREON**
Solar energy power system --- using Freon
[NASA-CASE-MFS-21628-1] c44 N75-32581
- FREQUENCIES**
Controlled oscillator system with a time dependent output frequency
[NASA-CASE-NPO-11962-1] c33 N74-10194
High efficiency multifrequency feed
[NASA-CASE-GSC-11909] c32 N74-20863
- FREQUENCY ANALYZERS**
Describing frequency discriminator using digital logic circuits and supplying single binary output signal
[NASA-CASE-MFS-14322] c08 N71-18692
Broadband frequency discriminator with resistive captive inductive networks
[NASA-CASE-NPO-10096] c07 N71-24583
Audio frequency analysis circuit for determining, displaying, and recording frequency of sweeping audio frequency signal
[NASA-CASE-NPO-11147] c14 N72-27408
Continuous Fourier transform method and apparatus --- for the analysis of simultaneous analog signal components
[NASA-CASE-ARC-10466-1] c60 N75-13539
Frequency discriminator and phase detector circuit
[NASA-CASE-NPO-11515-1] c33 N77-13315
- FREQUENCY CONTROL**
Automatic control of voltage supply to direct current motor
[NASA-CASE-XMS-04215-1] c09 N69-39987
Variable frequency magnetic coupled multivibrator with temperature compensated frequency control circuit
[NASA-CASE-XGS-00458] c09 N70-38604
Variable frequency magnetic coupled multivibrator with output signal of constant amplitude and waveform
[NASA-CASE-XGS-00131] c09 N70-38995
Development of automatic frequency discriminators and control for phase lock loop providing frequency preset capabilities
[NASA-CASE-XMP-08665] c10 N71-19467
Linear accelerator frequency control system
[NASA-CASE-XGS-05441] c10 N71-22962
Tuning arrangement for frequency control of magnetron-type electron discharge device
[NASA-CASE-XNP-09771] c09 N71-24841
Low loss dichroic plate
[NASA-CASE-NPO-13171-1] c32 N74-11000
Automatic frequency control for FM transmitter
[NASA-CASE-MFS-21540-1] c32 N74-19790
Acoustically controlled distributed feedback laser
[NASA-CASE-NPO-13175-1] c36 N75-31427
- FREQUENCY CONVERTERS**
Frequency to analog converters with unipolar field effect transistor for determining potential charge by pulse duration of input signal
[NASA-CASE-XNP-07040] c08 N71-12500
Describing static inverter with single or multiple phase output
[NASA-CASE-XMP-00663] c08 N71-18752
Voltage controlled, variable frequency relaxation oscillator with MOSFET variable current feed
[NASA-CASE-GSC-10022-1] c10 N71-25882
Development of family of frequency to amplitude converters for frequency analysis of complex input signal waveforms
[NASA-CASE-MSC-12395] c09 N72-25257
Variable frequency inverter for ac induction motors with torque, speed and braking control
[NASA-CASE-MFS-22088-1] c33 N75-15874
- FREQUENCY DISTRIBUTION**
Monopole antenna system for maximum omnidirectional efficiency for use on satellites
[NASA-CASE-XLA-00414] c07 N70-38200
Variable frequency subcarrier oscillator with temperature compensation
[NASA-CASE-XNP-03916] c09 N71-28810
Ultra stable frequency distribution system
[NASA-CASE-NPO-13836-1] c32 N76-31373
- FREQUENCY DIVIDERS**
Low phase noise frequency divider for use with deep space network communication system
[NASA-CASE-NPO-11569] c10 N73-26229
Technique for extending the frequency range of digital dividers
[NASA-CASE-LAR-10730-1] c33 N74-10223
Symmetrical odd-modulus frequency divider
[NASA-CASE-NPO-13426-1] c33 N75-31330
Electronic analog divider
[NASA-CASE-LFW-11881-1] c33 N77-17354
- FREQUENCY DIVISION MULTIPLEXING**
Earth satellite relay station for frequency multiplexed voice transmission
[NASA-CASE-GSC-10118-1] c07 N71-24621
System for monitoring condition responsive devices by using frequency division multiplex technique
[NASA-CASE-KSC-10521] c07 N73-20176
- FREQUENCY MEASUREMENT**
Measurement system for physical quantity represented by or converted to variable frequency signal
[NASA-CASE-MFS-20658-1] c14 N73-30386
Frequency measurement by coincidence detection with standard frequency
[NASA-CASE-MSC-14649-1] c33 N76-16331
- FREQUENCY MODULATION**
Accelerometer with FM output signals indicative of mechanical strain on it
[NASA-CASE-XLA-00492] c14 N70-34799
Circuitry for generating sync signals in FM communication systems including video information
[NASA-CASE-XNP-10830] c07 N71-11281
Demodulator for simultaneous demodulation of two modulating ac signal carriers close in frequency
[NASA-CASE-XMP-01160] c07 N71-11298
Optical tracker with pair of FM reticles having patterns 90 deg out of phase
[NASA-CASE-XGS-05715] c23 N71-16100
Atomic hydrogen maser with bulb temperature control by output frequency difference signal for wall shift elimination
[NASA-CASE-BQN-10654-1] c16 N73-13489
Device for locating electrically nonlinear objects and determining distance to object by FM signal transmission
[NASA-CASE-KSC-10108] c14 N73-25461
Automatic frequency control for FM transmitter
[NASA-CASE-MFS-21540-1] c32 N74-19790
Symmetrical odd-modulus frequency divider
[NASA-CASE-NPO-13426-1] c33 N75-31330
FM/CW radar system
[NASA-CASE-MFS-22234-1] c32 N76-33364
Frequency modulated oscillator
[NASA-CASE-MFS-23181-1] c33 N77-17351
- FREQUENCY MULTIPLIERS**
Multiple varactor for generating high frequencies with high power and high conversion efficiency
[NASA-CASE-XMP-04958-1] c10 N71-26414
Open loop digital frequency multiplier
[NASA-CASE-MSC-12709-1] c33 N77-24375
- FREQUENCY RANGES**
Variable time constant, wide frequency range smoothing network for noise removal from pulse chains
[NASA-CASE-XGS-01983] c10 N70-41964
Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide frequency range and minimizing noise effects
[NASA-CASE-XNP-09830] c14 N71-26266
Technique for extending the frequency range of digital dividers
[NASA-CASE-LAR-10730-1] c33 N74-10223
Multichannel logarithmic RF level detector
[NASA-CASE-LAR-11021-1] c32 N76-14321
Multiple rate digital command detection system with range clean-up capability
[NASA-CASE-NPO-13753-1] c32 N77-20289
- FREQUENCY RESPONSE**
Adjustable frequency response microphone
[NASA-CASE-LAR-11170-1] c32 N74-12843
- FREQUENCY SCANNING**
Apparatus and method for determining the position of a radiant energy source
[NASA-CASE-GSC-12147-1] c35 N77-20410
- FREQUENCY SHIFT**
Doppler frequency shift correction device for multiplex communication with Applications

SUBJECT INDEX

FUEL SYSTEMS

- Technology Satellites
[NASA-CASE-IGS-02749] c07 N69-39978
- Serrodyne traveling wave tube reentrant amplifier for synchronous communication satellites operating at microwave frequencies [NASA-CASE-IGS-01022] c07 N71-16088
- Multiplexed communication system design including automatic correction of transmission errors introduced by frequency spectrum shifts [NASA-CASE-IMP-01306] c07 N71-20814
- Doppler shifted laser beam as fluid velocity sensor [NASA-CASE-XAC-10770-1] c16 N71-24828
- FREQUENCY SHIFT KEYING**
Frequency shift keyed demodulator - circuit diagrams [NASA-CASE-IGS-02889] c07 N71-11282
- Frequency shift keying apparatus for use with pulse code modulation data transmission system [NASA-CASE-IGS-01537] c07 N71-23405
- FREQUENCY STABILIZATION**
Gas laser frequency stabilized by position of mirrors in resonant cavity [NASA-CASE-IGS-03644] c16 N71-18614
- Solid state broadband stable power amplifier [NASA-CASE-IMP-10654] c10 N71-26331
- FREQUENCY STANDARDS**
Development of method for synchronizing clocks at several ground stations based on signals received from spacecraft or satellites [NASA-CASE-IMP-08875] c10 N71-23099
- Atomic standard with variable storage volume [NASA-CASE-GSC-11895-1] c35 N76-15436
- Ultra stable frequency distribution system [NASA-CASE-NFO-13836-1] c32 N76-31373
- FREQUENCY SYNCHRONIZATION**
Synchronized digital communication system [NASA-CASE-IMP-03623] c09 N73-28084
- Ultra stable frequency distribution system [NASA-CASE-NFO-13836-1] c32 N76-31373
- FREQUENCY SYNTHESIZERS**
Digitally controlled frequency synthesizer for pulse frequency modulation telemetry systems [NASA-CASE-IGS-02317] c09 N71-23525
- A system for synchronizing synthesizers of communication systems [NASA-CASE-GSC-12148-1] c32 N77-22314
- FRICTION FACTOR**
Self lubricating gears and other mechanical parts having surface adapted to frictional contact [NASA-CASE-MPS-14971] c15 N71-24984
- FRICTION MEASUREMENT**
Kinetic and static friction force measurement between magnetic tape and magnetic head surfaces [NASA-CASE-IMP-08680] c14 N71-22995
- Static coefficient test method and apparatus [NASA-CASE-GSC-11893-1] c35 N76-31489
- FRICTION REDUCTION**
Development of low friction magnetic recording tape [NASA-CASE-IGS-00373] c23 N71-15978
- Hollow high strength rolling elements for antifriction bearings fabricated from preformed components [NASA-CASE-LEW-11026-1] c15 N73-33383
- Bearing material [NASA-CASE-LEW-11930-3] c24 N77-32249
- FRICTIONLESS ENVIRONMENTS**
Air bearings for near frictionless transfer of loads from one body to another [NASA-CASE-IMP-01887] c15 N71-10617
- Platform with several ground effect pads and plenum chambers [NASA-CASE-MPS-14685] c31 N71-15689
- Development of apparatus for simulating zero gravity conditions [NASA-CASE-MPS-12750] c27 N71-16223
- FROST**
Insulating system for receptacles of liquefied gases using wire cloth for forming frost layer [NASA-CASE-IMP-00341] c15 N70-33323
- FUEL CELLS**
Inorganic ion exchange membrane electrolytes for fuel cell use [NASA-CASE-IMP-04264] c03 N69-21337
- Operation method for combined electrolysis device and fuel cell using molten salt to produce power by thermoelectric regeneration mechanism [NASA-CASE-ILE-01645] c03 N71-20904
- Electrode sealing and insulation for fuel cells containing caustic liquid electrolytes using powdered plastic and metal [NASA-CASE-IMS-01625] c15 N71-23022
- Development and characteristics of ion-exchange membrane and electrode assembly for fuel cells or electrolysis cells [NASA-CASE-IMS-02063] c03 N71-29044
- Reconstituted asbestos matrix --- for use in fuel or electrolysis cells [NASA-CASE-MSC-12568-1] c24 N76-14204
- Dual membrane, hollow fiber fuel cell [NASA-CASE-NFO-13732-1] c44 N77-19581
- FUEL COMBUSTION**
Fuel combustor [NASA-CASE-LEW-12137-1] c20 N76-20215
- FUEL CONTROL**
Attitude and propellant flow control system for liquid propellant rocket vehicles [NASA-CASE-IMP-00185] c21 N70-34539
- Flexible ring slosh damping baffle for spacecraft fuel tank [NASA-CASE-LAR-10317-1] c32 N71-16103
- Submerged fuel tank baffles to prevent sloshing in liquid propellant rocket flight [NASA-CASE-ILA-04605] c32 N71-16106
- Control valve and coaxial variable injector for controlling bipropellant mixture ratio and flow [NASA-CASE-IMP-09702] c15 N71-17654
- Force balanced throttle valve for fuel control in rocket engines [NASA-CASE-NFO-10808] c15 N71-27432
- Variable-orifice hydraulic mechanism for aircraft gas turbine engine fuel control [NASA-CASE-LEW-11187-1] c28 N73-19793
- Automotive gas turbine fuel control [NASA-CASE-LEW-12785-1] c37 N77-13426
- FUEL FLOW**
Development of system for preheating vaporized fuel for use with internal combustion engines [NASA-CASE-NFO-12072] c28 N72-22772
- FUEL FLOW REGULATORS**
Solenoid two-step valve for bipropellant flow rate control to rocket engine [NASA-CASE-IMS-04890-1] c15 N70-22192
- Water electrolysis rocket engine with self-regulating stoichiometric fuel mixing regulator [NASA-CASE-IGS-08729] c28 N71-14044
- Oil cooling system for a gas turbine engine [NASA-CASE-LEW-12830-1] c07 N77-23106
- FUEL GAGES**
Response analyzing apparatus for liquid vapor interface sensor of sloshing rocket propellant [NASA-CASE-MPS-11204] c14 N71-29134
- FUEL INJECTION**
Apparatus for cooling and injecting hypergolic propellants into combustion chamber of small rocket engine [NASA-CASE-ILE-00303] c15 N70-36535
- Fuel injection system for maximum combustion efficiency of rocket engines [NASA-CASE-ILE-00111] c28 N70-38199
- Propellant injection assembly having individually removable and replaceable nozzles for liquid fueled rocket engines [NASA-CASE-IMP-00968] c28 N71-15660
- Fuel and oxidizer injection head for thrust chamber of reaction engine [NASA-CASE-NFO-10046] c28 N72-17843
- Improved injector with porous plug for bubbles of gas into feed lines of electrically conductive liquid [NASA-CASE-NFO-11377] c15 N73-27406
- Rocket propellant injector with porous faceplate for rocket engine combustion chamber [NASA-CASE-LEW-11071-1] c27 N73-27695
- Splash groove fuel injector [NASA-CASE-LEW-12417-1] c07 N76-22198
- FUEL OILS**
Oil cooling system for a gas turbine engine [NASA-CASE-LEW-12830-1] c07 N77-23106
- FUEL PUMPS**
Variable displacement fuel pump for internal combustion engines [NASA-CASE-MSC-12139-1] c28 N71-14058
- FUEL SYSTEMS**
Internal labyrinth and shield structure to

- improve electrical isolation of propellant feed source from ion thruster
[NASA-CASE-LEW-10210-1] c28 N71-26781
- Development of system for preheating vaporized fuel for use with internal combustion engines
[NASA-CASE-NFO-12072] c28 N72-22772
- Supersonic-combustion rocket
[NASA-CASE-LEW-11058-1] c20 N74-13502
- FUEL TANK PRESSURIZATION**
- Fuel tank pressure-relief device for venting cryogenic liquid vapors through tubes with porous plug
[NASA-CASE-XLE-00288] c15 N70-34247
- Automatically reciprocating, high pressure pump for use in spacecraft cryogenic propellants
[NASA-CASE-XNP-04731] c15 N71-24042
- Method and apparatus for pressurizing propellant tanks used in propulsion motor feed system
[NASA-CASE-XNP-00650] c27 N71-28929
- FUEL TANKS**
- Reduced gravity liquid configuration simulator to study propellant behavior in rocket fuel tanks
[NASA-CASE-XLE-02624] c12 N69-39988
- Flexible ring slosh damping baffle for spacecraft fuel tank
[NASA-CASE-LAR-10317-1] c32 N71-16103
- Submerged fuel tank baffles to prevent sloshing in liquid propellant rocket flight
[NASA-CASE-XLA-04605] c32 N71-16106
- Pressure sensor network for measuring liquid dynamic response in flight including fuel tank acceleration, liquid slosh amplitude, and fuel depth monitoring
[NASA-CASE-XLA-05541] c12 N71-26387
- Electrical failure detector in solid rocket propellant motor insulation against thermal degradation by fuel grain
[NASA-CASE-XNP-03968] c14 N71-27186
- FUEL VALVES**
- Apparatus for cooling and injecting hypergolic propellants into combustion chamber of small rocket engine
[NASA-CASE-XLE-00303] c15 N70-36535
- Semitoroidal diaphragm cavitating flow control valve
[NASA-CASE-XNP-09704] c12 N71-18615
- Filler valve design for supplying liquid propellants at high pressure to space vehicles
[NASA-CASE-XNP-01747] c15 N71-23024
- Combination automatic-starting electrical plasma torch and gas shutoff valve --- for satellite attitude control
[NASA-CASE-XLE-10717] c37 N75-29426
- Fluid valve assembly
[NASA-CASE-MSC-12731-1] c37 N76-26511
- FUEL-AIR RATIO**
- Internal combustion engine with electrostatic discharging fuels
[NASA-CASE-NFO-13798-1] c37 N77-25535
- FUNCTION GENERATORS**
- Mechanical function generators with potentiometer as sensing element
[NASA-CASE-XAC-00001] c15 N71-28952
- Digital quasi-exponential function generator
[NASA-CASE-NPO-11130] c08 N72-20176
- Service life of electromechanical device for generating sine/cosine functions
[NASA-CASE-LAR-10503-1] c09 N72-21248
- Function generators for producing complex vibration mode patterns used to identify vibration mode data
[NASA-CASE-LAR-10310-1] c10 N73-20253
- Integrated circuit tangent function generator
[NASA-CASE-MSC-13907-1] c10 N73-26230
- FURTABLE ANTENNAS**
- Development and characteristics of extensible dipole antenna using deformable tubular metallic strip element
[NASA-CASE-HQN-00937] c07 N71-28979
- Furlable antenna for spacecraft
[NASA-CASE-NFO-11361] c07 N72-32169
- Furlable antenna --- antenna design
[NASA-CASE-NPO-13553-1] c33 N76-32457
- FURNACES**
- High speed infrared furnace
[NASA-CASE-XLE-10466] c17 N69-25147
- Development of black-body source calibration furnace
[NASA-CASE-XLE-01399] c33 N71-15625
- Induction heating of metallurgical specimens to high temperatures in coil furnace
[NASA-CASE-XLE-04026] c14 N71-23267
- Electric furnace for vacuum and zero gravity melting of high melting point materials during earth orbit
[NASA-CASE-MFS-20710] c11 N72-23215
- High temperature strain gage calibration fixture
[NASA-CASE-LAR-11500-1] c35 N76-24523
- General purpose rocket furnace
[NASA-CASE-MFS-23460-1] c09 N77-12070
- FUSION (MELTING)**
- Silver chloride use in technique for fusion bonding of graphite to silver, glass, ceramics, and certain other metals
[NASA-CASE-XGS-00963] c15 N69-39735
- Process for fiberizing ceramic materials with high fusion temperatures and tensile strength
[NASA-CASE-XNP-00597] c18 N71-23088
- FUSION WELDING**
- Fabricating solar cells with dielectric layers to improve glass fusion
[NASA-CASE-XGS-04531] c03 N69-24267
- Control of fusion welding through use of thermocouple wire
[NASA-CASE-MFS-06074] c15 N71-20393
- Diffusion welding in air --- solid state welding of butt joint by fusion welding, surface cleaning, and heating
[NASA-CASE-LEW-11387-1] c37 N74-18128
- G**
- GADOLINIUM**
- Doping silicon material with gadolinium to increase radiation resistance of solar cells
[NASA-CASE-XLE-02792] c26 N71-10607
- Gadolinium or samarium doped-silicon semiconductor material with resistance to radiation damage for use in solar cells
[NASA-CASE-XLE-10715] c26 N71-23292
- GALLIUM**
- Device for measuring two orthogonal components of force with gallium flotation of measuring target for use in vacuum environments
[NASA-CASE-XAC-04885] c14 N71-23790
- GALLIUM ARSENIDES**
- Describing method for vapor deposition of gallium arsenide films to manganese substrates to provide semiconductor devices with low resistance substrates
[NASA-CASE-XNP-01328] c26 N71-18064
- Gallium arsenide solar cell preparation by surface deposition of cuprous iodide on thin n-type polycrystalline layers and heating in iodine vapor
[NASA-CASE-XNP-01960] c09 N71-23027
- Water content in vapor deposition atmosphere for forming n-type and p-type junctions of zinc doped gallium arsenide
[NASA-CASE-XNP-01961] c26 N71-29156
- Vapor phase growth of groups 3-5 compounds by hydrogen chloride transport of the elements
[NASA-CASE-LAR-11144-1] c25 N75-26043
- Vapor deposition apparatus --- semiconductors and gallium arsenides
[NASA-CASE-HQN-10462] c25 N75-29192
- GALLIUM COMPOUNDS**
- Growth of gallium nitride crystals
[NASA-CASE-LAR-11302-1] c25 N75-13054
- GALVANIC SKIN RESPONSE**
- Adhesive spray process for attaching biomedical skin electrodes
[NASA-CASE-XFE-07658-1] c05 N71-26293
- GAMMA RAYS**
- Design of gamma ray spectrometer for measurement of intense radiation using Compton scattering effect
[NASA-CASE-MFS-21441-1] c14 N73-30392
- Low intensity X-ray and gamma-ray imaging device
[NASA-CASE-GSC-12263-1] c35 N77-29471
- GANTRY CRANES**
- Design and characteristics of mechanically extended and telescoping boom on crane assembly
[NASA-CASE-NPO-11118] c03 N72-25021
- GAPS**
- Electromagnetic transducer recording head having a laminated core section and tapered gap

- [NASA-CASE-NPO-10711-1] c35 N77-21392
- GARMENTS**
- Electromedical garment, applying vectorcardiologic type electrodes to human torsos for data recording during physical activity
[NASA-CASE-XFR-10856] c05 N71-11189
- Flexible joint for pressurizable garment
[NASA-CASE-HSC-11072] c54 N74-32546
- Spacesuit torso closure
[NASA-CASE-ARC-11100-1] c54 N77-25784
- GAS ANALYSIS**
- Gas analyzer for bi-gaseous mixtures suitable for use in test facilities
[NASA-CASE-XLA-01131] c14 N71-10774
- Describing crystal oscillator instrument for detecting condensable gas contaminants in vacuum apparatus
[NASA-CASE-NPO-10144] c14 N71-17701
- Design and characteristics of time of flight mass spectrometer to measure or analyze gases at low pressures and time of flight of single gas molecule
[NASA-CASE-XNP-01056] c14 N71-23041
- Microwave double resonance spectroscopy absorption cell for gas analysis
[NASA-CASE-LAR-10305] c14 N71-26137
- Ion microprobe mass spectrometer with cooled electrode target for analyzing traces of fluids
[NASA-CASE-ERC-10014] c14 N71-28863
- Development and characteristics of injection system for use with gas chromatograph
[NASA-CASE-ARC-10344-1] c14 N72-21433
- Nondispersive gas analysis using radiation detection for quantitative analysis
[NASA-CASE-ARC-10308-1] c06 N72-31141
- Apparatus for analyzing gas samples in containers including vacuum chamber, mass spectrometer, and gas chromatography
[NASA-CASE-GSC-10903-1] c14 N73-12444
- Coaxial anode wire for gas radiation counters
[NASA-CASE-GSC-11492-1] c35 N74-26949
- Fast scan control for deflection type mass spectrometers
[NASA-CASE-LAR-11428-1] c35 N74-34857
- NDIR gas analyzer based on absorption modulation ratios for known and unknown samples
[NASA-CASE-ARC-10802-1] c35 N75-30502
- Gas compression analysis --- for oxygen supply equipment
[NASA-CASE-HSC-14757-1] c37 N76-13496
- Stack plume visualization system
[NASA-CASE-LAR-11675-1] c45 N76-17656
- Mulling device for detection of trace gases by NDIR absorption
[NASA-CASE-ARC-10760-1] c25 N76-22323
- Analysis of volatile organic compounds --- trace amounts of organic volatiles in gas samples
[NASA-CASE-HSC-14428-1] c23 N77-17161
- A method for aerosol analysis by thermoluminescence
[NASA-CASE-LAR-12046-1] c45 N77-17609
- Fluid sampling device
[NASA-CASE-GSC-12143-1] c35 N77-32456
- GAS BAGS**
- Payload soft landing system using stowable gas bag
[NASA-CASE-XLA-09881] c31 N71-16085
- GAS BEARINGS**
- Externally pressurized air bearing for gyros operating in high temperature, low gravity environments
[NASA-CASE-XMF-00515] c15 N70-34664
- Slit regulated gas journal bearing
[NASA-CASE-XNP-00476] c15 N70-38620
- Air bearings for spacecraft gyros
[NASA-CASE-XMF-00339] c15 N70-39896
- Air bearings for near frictionless transfer of loads from one body to another
[NASA-CASE-XMF-01887] c15 N71-10617
- Fluid power transmission and gas bearing system
[NASA-CASE-HMS-01445] c12 N71-16031
- Bismuth and lead surface coatings for gas bearings in aerospace engineering
[NASA-CASE-XGS-02011] c15 N71-20739
- Swivel support for gas bearing for position adjustment between ball and supporting cup
[NASA-CASE-XMF-07808] c15 N71-23812
- Low friction gas bearing system for fluid power transmission to bearing-supported payload
[NASA-CASE-ERC-10097] c15 N71-28465
- Gas bearing for model support with capacity for measuring angular displacement of model in bearing
[NASA-CASE-XLA-09346] c15 N71-28740
- Journal air bearing with cylindrical cup designed to ride on shaft
[NASA-CASE-HFS-20423] c15 N72-11388
- Air bearing for use in exterior environment for moving heavy loads
[NASA-CASE-WLP-10002] c15 N72-17451
- Axially and radially controllable magnetic bearing
[NASA-CASE-GSC-11551-1] c37 N76-18459
- Thrust bearing
[NASA-CASE-LEW-11949-1] c37 N76-29588
- GAS CHROMATOGRAPHY**
- Micropacked column for rapid chromatographic analysis using low gas flow rates
[NASA-CASE-XNP-04816] c06 N69-39936
- Automatic baseline stabilization for ionization detector used in gas chromatograph
[NASA-CASE-XNP-03128] c10 N70-41991
- Gas chromatographic method for determining water in nitrogen tetroxide rocket propellant
[NASA-CASE-NFO-10234] c06 N72-17094
- Development and characteristics of injection system for use with gas chromatograph
[NASA-CASE-ARC-10344-1] c14 N72-21433
- Gas chromatographic method for analyzing hydrogen deuterium mixtures
[NASA-CASE-NFO-11322] c06 N72-25146
- Ultraviolet chromatographic detector for quantitative and qualitative analysis of compounds
[NASA-CASE-HQN-10756-1] c14 N72-25428
- Apparatus for analyzing gas samples in containers including vacuum chamber, mass spectrometer, and gas chromatography
[NASA-CASE-GSC-10903-1] c14 N73-12444
- Gas chromatograph injection system
[NASA-CASE-ARC-10344-2] c35 N75-26334
- GAS COOLED REACTORS**
- Gaseous core diffusion nuclear reactor for thermal energy generation
[NASA-CASE-LEW-10250-1] c22 N71-28759
- GAS COOLING**
- Gas balancing, cryogenic refrigeration apparatus with Joule-Thomson valve assembly
[NASA-CASE-NFO-10309] c15 N69-23190
- Gas cooled high temperature thermocouple
[NASA-CASE-XLE-09475-1] c33 N71-15568
- GAS DENSITY**
- Dynamic sensor for gas pressure or density measurement
[NASA-CASE-XAC-02877] c14 N70-41681
- Device for simultaneously determining density, velocity, and temperature of streaming gas
[NASA-CASE-XLA-03375] c16 N71-24074
- Coherent light beam device and method for measuring gas density in vacuum chambers
[NASA-CASE-XER-11203] c14 N71-28994
- Absorbing gas reactivity control system for minimizing power distribution and perturbation in nuclear reactors
[NASA-CASE-XLB-04599] c22 N72-20597
- Electrodeposition method for producing crystalline material from dense gaseous medium
[NASA-CASE-NPO-10440] c15 N72-21466
- Wide range dynamic pressure sensor with vibrating diaphragm for measuring density and pressure of gaseous environment
[NASA-CASE-ARC-10263-1] c14 N72-22438
- Absolute pressure measuring device for measuring gas density level in high vacuum range
[NASA-CASE-LAR-10000] c14 N73-30394
- Method and apparatus for compensating reflection losses in a path length modulated absorption-absorption trace gas detector --- for determining density of gas
[NASA-CASE-ARC-10631-1] c74 N76-20958
- GAS DETECTORS**
- Method and transducer device for detecting presence of hydrogen gas
[NASA-CASE-XMF-03873] c06 N69-39733
- Development of device for detecting hydrogen in ambient environments
[NASA-CASE-HFS-11537] c14 N71-20442
- Gas leak detection in evacuated systems using ultraviolet radiation probe
[NASA-CASE-ERC-10034] c15 N71-24896

- Fast response miniature carbon dioxide detector with no moving parts for measuring concentration in any atmosphere
[NASA-CASE-HSC-13332-1] c14 N72-21408
- Fluorescence detector for monitoring atmospheric pollutants
[NASA-CASE-NPO-13231-1] c45 N75-27585
- Carbon monoxide monitor --- using real time operation
[NASA-CASE-HFS-22060-1] c35 N75-29380
- Method and apparatus for compensating reflection losses in a path length modulated absorption-absorption trace gas detector --- for determining density of gas
[NASA-CASE-ARC-10631-1] c74 N76-20958
- Indicator providing continuous indication of the presence of a specific pollutant in air
[NASA-CASE-NFO-13474-1] c45 N76-21742
- Particulate and aerosol detector
[NASA-CASE-LAR-11434-1] c35 N76-22509
- Optically selective, acoustically resonant gas detecting transducer
[NASA-CASE-ARC-10639-1] c35 N77-19388
- Cryogenic liquid sensor
[NASA-CASE-NFO-10619-1] c35 N77-21393
- GAS DISCHARGE TUBES**
- Direct current powered self repeating plasma accelerator with interconnected annular and linear discharge channels
[NASA-CASE-XLA-03103] c25 N71-21693
- Double discharge metal vapor laser with metal halide as a lasing agent
[NASA-CASE-NFO-13448-2] c36 N77-24469
- GAS DISCHARGES**
- Radio frequency noise generator having microwave slow-wave structure in gas discharge plasma
[NASA-CASE-XER-11019] c09 N71-23598
- GAS EVOLUTION**
- Development of filter system for control of outgas contamination in vacuum conditions using absorbent beds of molecular sieve zeolite, silica gel, and charcoal
[NASA-CASE-HFS-14711] c15 N71-26185
- GAS EXPANSION**
- Sealed electric storage battery with gas manifold interconnecting each cell
[NASA-CASE-XNP-03378] c03 N71-11051
- Method and apparatus for producing very low temperature refrigeration based on gas pressure balance
[NASA-CASE-XNP-08877] c15 N71-23025
- Gas-operated actuator with cyclic motion of expansion chamber
[NASA-CASE-NFO-11340] c15 N72-33477
- GAS FLOW**
- Tubular flow restrictor for gas flow control in pipeline
[NASA-CASE-NPO-10117] c15 N71-15608
- Developing high pressure gas purification and filtration system for use in test operations of space vehicles
[NASA-CASE-HFS-12806] c14 N71-17588
- Burst diaphragm flow initiator for installation in short duration wind tunnels
[NASA-CASE-HFS-12915] c11 N71-17600
- Color photointerpretation of interference colors reflected from thin film oil-coated components in moving gases for gas flow visualization
[NASA-CASE-XMF-01779] c12 N71-20815
- Transducer for monitoring oxygen flow in respirator
[NASA-CASE-FRC-10012] c14 N72-17329
- Design, development, and operation of shock tube with bypass piston tunnel
[NASA-CASE-NPO-12109] c11 N72-22245
- Continuous gas flow control by fluidic proportional thruster system
[NASA-CASE-ARC-10106-1] c28 N72-22769
- Development of filter apparatus for gas separation and characteristics of filter cell support frame for improved operation
[NASA-CASE-MSC-12297] c14 N72-23457
- Pressurized inert gas feed for lighting system
[NASA-CASE-RSC-10644] c09 N72-27227
- Development of method for controlling vapor content of gas
[NASA-CASE-NPO-10633] c03 N72-28025
- Gas flow control device, including housing and input port
[NASA-CASE-NFO-11479] c15 N73-13462
- Compact hydrogenator
[NASA-CASE-NPO-11682-1] c35 N74-15127
- Apparatus for establishing flow of a fluid mass having a known velocity
[NASA-CASE-HFS-21424-1] c34 N74-27730
- Condensate removal device for heat exchanger
[NASA-CASE-HSC-14143-1] c77 N75-20139
- Flow measuring apparatus
[NASA-CASE-LBW-12078-1] c35 N75-30503
- GAS GENERATORS**
- Chlorine generator for purifying water in life support systems of manned spacecraft
[NASA-CASE-XLA-08913] c14 N71-28933
- Gas operated quick disconnect coupling for umbilical connectors
[NASA-CASE-NFO-11202] c15 N72-25450
- Actuator operated by electrolytic drive gas generator and evacuator
[NASA-CASE-NPO-11369] c15 N73-13467
- Development and operating principles of gas generator for deploying recovery parachutes from space capsules during atmospheric entry
[NASA-CASE-LAR-10549-1] c31 N73-13898
- Hydrogen rich gas generator
[NASA-CASE-NPO-13342-1] c37 N76-16446
- Hydrogen-rich gas generator
[NASA-CASE-NPO-13464-1] c44 N76-18642
- Hydrogen rich gas generator
[NASA-CASE-NPO-13342-2] c44 N76-29700
- Hydrogen rich gas generator
[NASA-CASE-NPO-13464-2] c44 N76-29704
- Hydrogen-rich gas generator
[NASA-CASE-NPO-13560-1] c44 N77-10636
- GAS GUNS**
- Electric arc device for minimizing electrode ablation and heating gases to supersonic or hypersonic wind tunnel temperatures
[NASA-CASE-XAC-00319] c25 N70-41628
- GAS HEATING**
- Bimetallic fluid displacement apparatus --- for stirring and heating stored gases and liquids
[NASA-CASE-ARC-10441-1] c35 N74-15126
- GAS INJECTION**
- Pressurized gas injection for burning rate control of solid propellants
[NASA-CASE-XLE-03494] c27 N71-21819
- Compact hydrogenator
[NASA-CASE-NFO-11682-1] c35 N74-15127
- Gas chromatograph injection system
[NASA-CASE-ARC-10344-2] c35 N75-26334
- GAS IONIZATION**
- Electrostatic modulator for communicating through plasma sheath formed around spacecraft during reentry
[NASA-CASE-XLA-01400] c07 N70-41331
- Multichannel photoionization chamber for measuring absorption, photoionization yield, and coefficients of gases
[NASA-CASE-ERC-10044-1] c14 N71-27090
- Modulated hydrogen ion flame detector
[NASA-CASE-ARC-10322-1] c35 N76-18403
- Charge transfer reaction laser with preionization means
[NASA-CASE-NPO-13945-1] c36 N77-19418
- GAS LASERS**
- Gas laser frequency stabilized by position of mirrors in resonant cavity
[NASA-CASE-XGS-03644] c16 N71-18614
- Inert gas metallic vapor laser
[NASA-CASE-NPO-13449-1] c36 N75-32441
- Diffused waveguiding capillary tube with distributed feedback for a gas laser
[NASA-CASE-NPO-13544-1] c36 N76-18428
- Charge transfer reaction laser with preionization means
[NASA-CASE-NFO-13945-1] c36 N77-19418
- GAS LUBRICANTS**
- High temperature gas lubricant consisting of two fluoro-bromo-methanes
[NASA-CASE-XLE-00353] c18 N70-39897
- Thrust bearing
[NASA-CASE-LBW-11949-1] c37 N76-29588
- A cantilever mounted resilient pad gas bearing
[NASA-CASE-LBW-12569-1] c37 N77-24496
- GAS MASERS**
- Solid state chemical source for ammonia beam masers
[NASA-CASE-XGS-01504] c16 N70-41578

- Atomic hydrogen maser with bulb temperature control by output frequency difference signal for wall shift elimination
[NASA-CASE-NQN-10654-1] c16 N73-13489
- Method of producing a storage bulb for an atomic hydrogen maser
[NASA-CASE-NFO-13050-1] c36 N75-15029
- Atomic standard with variable storage volume
[NASA-CASE-GSC-11895-1] c35 N76-15436
- GAS MIXTURES**
- Gas analyzer for bi-gaseous mixtures suitable for use in test facilities
[NASA-CASE-XLA-01131] c14 N71-10774
- Equipment for measuring partial water vapor pressure in gas tank
[NASA-CASE-XMS-01618] c14 N71-20741
- Separation cell with permeable membranes for fluid mixture component separation
[NASA-CASE-XMS-02952] c18 N71-20742
- Gas chromatographic method for analyzing hydrogen deuterium mixtures
[NASA-CASE-NFO-11222] c06 N72-25146
- Hydrogen rich gas generator
[NASA-CASE-NPO-13342-2] c44 N76-29700
- Hydrogen-rich gas generator
[NASA-CASE-NFO-13560-1] c44 N77-10636
- GAS PIPES**
- Tubular flow restrictor for gas flow control in pipeline
[NASA-CASE-NPO-10117] c15 N71-15608
- GAS PRESSURE**
- Expulsion and measuring device for determining quantity of liquid in tank under conditions of weightlessness
[NASA-CASE-XMS-01546] c14 N70-40233
- Dynamic sensor for gas pressure or density measurement
[NASA-CASE-XAC-02877] c14 N70-41681
- Wide range dynamic pressure sensor with vibrating diaphragm for measuring density and pressure of gaseous environment
[NASA-CASE-ARC-10263-1] c14 N72-22438
- Measurement of gas production of microorganisms --- using pressure sensors
[NASA-CASE-LAR-11326-1] c35 N75-33368
- Depressurization of arc lamps
[NASA-CASE-NFO-10790-1] c33 N77-21316
- GAS SPECTROSCOPY**
- Optically selective, acoustically resonant gas detecting transducer
[NASA-CASE-ARC-10639-1] c35 N77-19388
- GAS STREAMS**
- Device for simultaneously determining density, velocity, and temperature of streaming gas
[NASA-CASE-XLA-03375] c16 N71-24074
- Stagnation pressure probe --- for measuring pressure of supersonic gas streams
[NASA-CASE-LAR-11139-1] c35 N74-32878
- Process for removing sulfur dioxide from gas streams --- using iron as a catalyst
[NASA-CASE-MSC-16299-1] c45 N77-31668
- GAS TEMPERATURE**
- Device for simultaneously determining density, velocity, and temperature of streaming gas
[NASA-CASE-XLA-03375] c16 N71-24074
- GAS TURBINE ENGINES**
- Variable-orifice hydraulic mechanism for aircraft gas turbine engine fuel control
[NASA-CASE-LFW-11187-1] c28 N73-19793
- Swirl can, full-annulus combustion chambers for high performance gas turbine engines
[NASA-CASE-LFW-11326-1] c23 N73-30665
- Controlled separation combustor --- airflow distribution in gas turbine engines
[NASA-CASE-LFW-11593-1] c20 N76-14190
- Fused silicide coatings containing discrete particles for protecting niobium alloys --- used in space shuttle thermal protection systems and turbine engine components
[NASA-CASE-LFW-11179-1] c27 N76-16229
- Dual output variable pitch turbofan actuation system
[NASA-CASE-LFW-12419-1] c07 N77-14025
- Ocean thermal plant
[NASA-CASE-MSC-11034-1] c44 N77-21666
- Oil cooling system for a gas turbine engine
[NASA-CASE-LFW-12830-1] c07 N77-23106
- Blade retainer assembly
[NASA-CASE-LFW-12608-1] c07 N77-27116
- Nickel base alloy --- for gas turbine engine stator vanes
[NASA-CASE-LFW-12270-1] c26 N77-32280
- Bearing seat usable in a gas turbine engine
[NASA-CASE-LFW-12477-1] c37 N77-32501
- GAS TURBINES**
- Method for maintaining good performance in gas turbine during air flow distortion
[NASA-CASE-LFW-10286-1] c28 N71-28915
- Gas turbine exhaust nozzle --- for noise reduction
[NASA-CASE-LFW-11569-1] c07 N74-15453
- Counter pumping debris excluder and separator
[NASA-CASE-LFW-11855-1] c37 N76-20487
- Direct heating surface combustor
[NASA-CASE-LFW-11877-1] c44 N76-28646
- Automotive gas turbine fuel control
[NASA-CASE-LFW-12785-1] c37 N77-13426
- GAS VALVES**
- High-temperature, high-pressure spherical segment valve
[NASA-CASE-XAC-00074] c15 N70-34817
- Shrink-fit vacuum system gas valve
[NASA-CASE-XGS-00587] c15 N70-35087
- Gas valve operated by thermally expanding and contracting device
[NASA-CASE-XLE-00815] c15 N70-35407
- Three-port transfer valve with one port open continuously suitable for manned space flight
[NASA-CASE-XAC-01158] c15 N71-23051
- GAS WELDING**
- Emission spectroscopy method for contamination monitoring of inert gas metal arc welding
[NASA-CASE-IMP-02039] c15 N71-15871
- Grain refinement control in TIG arc welding
[NASA-CASE-MSC-19095-1] c37 N75-19683
- GAS-LIQUID INTERACTIONS**
- Fluid control apparatus and method
[NASA-CASE-LAR-11110-1] c34 N75-26282
- GASDYNAMIC LASERS**
- Diatomic infrared gasdynamic laser --- for producing different wavelengths
[NASA-CASE-ABC-10370-1] c36 N75-31426
- GASEOUS DIFFUSION**
- Gas purged dry box glove reducing permeation of air or moisture into dry box or isolator by diffusion through glove
[NASA-CASE-XLE-02531] c05 N71-23080
- Gaseous core diffusion nuclear reactor for thermal energy generation
[NASA-CASE-LFW-10250-1] c22 N71-28759
- GASEOUS FISSION REACTORS**
- Nuclear gaseous reactor for heating working fluid to high temperatures
[NASA-CASE-XLE-00321] c22 N70-34572
- Gaseous core diffusion nuclear reactor for thermal energy generation
[NASA-CASE-LFW-10250-1] c22 N71-28759
- GASEOUS ROCKET PROPELLANTS**
- Electrostatic ion engines using high velocity electrons to ionize propellant
[NASA-CASE-XLE-00376] c28 N70-37245
- Detonation reaction engine comprising outer housing enclosing pair of inner walls for continuous flow
[NASA-CASE-IMP-06926] c28 N71-22983
- GASES**
- Apparatus and process for volumetrically dispensing reagent quantities of volatile chemicals for small batch reactions
[NASA-CASE-NPO-10070] c15 N71-27372
- High speed scanner for measuring mass of preselected gases at high sampling rate
[NASA-CASE-LAR-10766-1] c14 N72-21432
- Observation window for internal gas confining chamber
[NASA-CASE-NFO-10890] c11 N73-12265
- Device for detection of combustion light preceding gaseous explosions
[NASA-CASE-LAR-10739-1] c14 N73-16484
- GASKETS**
- Leakproof soft metal seal for use in very high vacuum systems operating at cryogenic temperatures
[NASA-CASE-IGS-02441] c15 N70-41629
- Reinforced polyquinoxaline gasket and method of preparing the same --- resistant to ionizing radiation and liquid hydrogen temperatures
[NASA-CASE-HPS-21364-1] c37 N74-18126

GATES (CIRCUITS)

Flux gate magnetometer with toroidal gating coil and solenoidal output coil for signal modulation or amplification
[NASA-CASE-XGS-01881] c09 N70-40123

Silicon controlled rectifier pulse gate amplifier for blocking false gating caused by negative transient voltages
[NASA-CASE-XIA-07497] c09 N71-12514

Logic AND gate for fluid circuits
[NASA-CASE-XLA-07391] c12 N71-17579

Synchronous counter design incorporating cascaded binary stages driven by previous stages and inputs through NAND gates
[NASA-CASE-XGS-02440] c08 N71-19432

Switching series regulator with gating control network
[NASA-CASE-XMS-09352] c09 N71-23316

Two-dimensional radiant energy array computers and computing devices
[NASA-CASE-GSC-11839-2] c60 N76-18803

GATES (OPENINGS)

Longitudinal film gate and lock mechanism for securing film in motion picture cameras under vibration and high acceleration loads
[NASA-CASE-LAR-10686] c14 N71-28935

GAW-1 AIRFOIL

Airfoil shape for flight at subsonic speeds --- design analysis and aerodynamic characteristics of the GAW-1 airfoil
[NASA-CASE-LAR-10585-1] c02 N76-22154

GEARS

Precision stepping drive device using cam disk
[NASA-CASE-MFS-14772] c15 N71-17692

Gearing system for eliminating backlash and filtering input torque fluctuations from high inertia load
[NASA-CASE-XGS-04227] c15 N71-21744

Self lubricating gears and other mechanical parts having surface adapted to frictional contact
[NASA-CASE-MFS-14971] c15 N71-24984

Concentric differential gearing arrangement
[NASA-CASE-ARC-10462-1] c37 N74-27901

Sequencing device utilizing planetary gear set
[NASA-CASE-MSC-19514-1] c37 N77-19459

GELLED ROCKET PROPELLANTS

Method and apparatus for producing fine particles in cryogenic liquid bath for gelled rocket propellants
[NASA-CASE-NFO-10250] c23 N71-16212

GELS

Intermittent type silica gel adsorption refrigerator for providing temperature control for spacecraft components
[NASA-CASE-XNF-00920] c15 N71-15906

GENERATORS

Apparatus for establishing flow of a fluid mass having a known velocity
[NASA-CASE-MFS-21424-1] c34 N74-27730

GERMANIUM

Germanium coated microbridge and method
[NASA-CASE-MFS-23274-1] c76 N76-30084

GIMBALS

Gimbaled partially submerged nozzle for solid propellant rocket engines for providing directional control
[NASA-CASE-XMP-01544] c28 N70-34162

Inertial gimbal alignment system for spacecraft guidance
[NASA-CASE-XMP-01669] c21 N71-23289

Three stage motion restraining mechanism for restraining and damping three dimensional vibrational movement of gimbaled package during launch of spacecraft
[NASA-CASE-GSC-10306-1] c15 N71-24694

Hermetically sealed vibration damper design for use in gimbal assembly of spacecraft inertial guidance system
[NASA-CASE-MSC-10959] c15 N71-26243

Low friction bearing and lock mechanism for two-axis gimbal carrying satellite payload
[NASA-CASE-GSC-10556-1] c31 N71-26537

Failure detection and control means for improved drift performance of a gimbaled platform system
[NASA-CASE-MFS-23551-1] c04 N76-26175

GLANDS (SEALS)

Development of mating flat surfaces to inhibit leakage of fluid around shafts

[NASA-CASE-XLE-10326-2] c15 N72-29488

GLASS

Fabricating solar cells with dielectric layers to improve glass fusion
[NASA-CASE-XGS-04531] c03 N69-24267

Reduced gravity liquid configuration simulator to study propellant behavior in rocket fuel tanks
[NASA-CASE-XLE-02624] c12 N69-39988

Metal pattern bonding technique for cover glass attachment to silicon solar cells for space applications
[NASA-CASE-XLE-08569] c03 N71-23449

Apparatus for applying thin glass slides to solar cells
[NASA-CASE-NFO-10575] c03 N72-25019

Glass-to-metal seals comprising relatively high expansion metals
[NASA-CASE-LEW-10698-1] c37 N74-21063

Covered silicon solar cells and method of manufacture --- with polymeric films
[NASA-CASE-LEW-11065-2] c44 N76-14600

Reaction cured glass and glass coatings
[NASA-CASE-ARC-11051-1] c27 N77-10201

Window defect planar mapping technique
[NASA-CASE-MSC-19442-1] c74 N77-10899

Method of forming shrink-fit compression seal
[NASA-CASE-LAR-11563-1] c37 N77-23482

GLASS COATINGS

Method of attaching cover glass to silicon solar cell without using adhesive
[NASA-CASE-XLE-08569-2] c03 N71-24681

Helium outgassing process for fused glass coating on ion accelerator grid
[NASA-CASE-LEW-10278-1] c15 N71-28582

Development of process for constructing protective covers for solar cells
[NASA-CASE-GSC-11514-1] c03 N72-24037

GLASS ELECTRODES

Liquid junction for glass electrode or pH meters
[NASA-CASE-NFO-10682] c15 N70-34699

GLASS FIBERS

Nonmagnetic hermetically sealed battery case made of epoxy resin and woven glass tape for use with electrochemical cells in spacecraft
[NASA-CASE-XGS-00886] c03 N71-11053

Lathe tool and holder combination for machining resin impregnated fiberglass cloth laminates
[NASA-CASE-XLA-10470] c15 N72-21489

Development and characteristics of polyimide impregnated laminates with fiberglass cloth backing for application as printed circuit boards
[NASA-CASE-MFS-20408] c18 N73-12604

Method of repairing discontinuity in fiberglass structures
[NASA-CASE-LAR-10416-1] c24 N74-30001

Fiber modified polyurethane foam for ballistic protection
[NASA-CASE-ARC-10714-1] c27 N76-15310

Vacuum pressure molding technique
[NASA-CASE-LAR-10073-1] c37 N76-24575

Low density bismaleimide-carbon microballoon composites
[NASA-CASE-ARC-11040-1] c24 N77-19173

GLAUCOMA

Intra-ocular pressure normalization apparatus
[NASA-CASE-LEW-12955-1] c52 N77-30736

Intra-ocular pressure normalization technique and equipment
[NASA-CASE-LEW-12723-1] c52 N77-30737

GLIDE PATHS

Integrated lift/drag controller for aircraft
[NASA-CASE-ARC-10456-1] c05 N75-12930

GLOBES

Orbital and entry tracking accessory for globes --- to provide range requirements for reentry vehicles to any landing site
[NASA-CASE-LAR-10626-1] c19 N74-21015

GLOVES

Gas purged dry box glove reducing permeation of air or moisture into dry box or isolator by diffusion through glove
[NASA-CASE-XLE-02531] c05 N71-23080

GLOW DISCHARGES

Deposition of alloy films --- on irregularly shaped metal object
[NASA-CASE-LEW-11262-1] c27 N74-13270

SUBJECT INDEX

GUIDANCE (NOTION)

Electric discharge for treatment of trace contaminants
[NASA-CASE-ARC-10975-1] c54 N77-24771

GLUCOSE
Use of enzyme hexokinase and glucose to reduce inherent light levels of ATP in luciferase compositions
[NASA-CASE-IGS-05533] c04 N69-27487

GOLD COATINGS
Lithium drifted silicon radiation detector with gold rectifying contacts
[NASA-CASE-XLE-10529] c14 N69-23191

GONDOLAS
System for controlling torque buildup in suspension of gondola connected to balloon by parachute shroud lines
[NASA-CASE-GSC-11077-1] c02 N73-13008

GRANULAR MATERIALS
Development of device for separating, collecting, and viewing soil particles
[NASA-CASE-XNP-09770] c15 N71-20440

GRAPHITE
Silver chloride use in technique for fusion bonding of graphite to silver, glass, ceramics, and certain other metals
[NASA-CASE-XGS-00963] c15 N69-39735
Method of preparing graphite reinforced aluminum composite
[NASA-CASE-MPS-21077-1] c24 N75-28135
Graphite reinforced bone cement
[NASA-CASE-NPO-13764-1] c24 N76-26281

GRATINGS (SPECTRA)
Concave grating spectrometer for use in near and vacuum ultraviolet regions
[NASA-CASE-IGS-01036] c14 N70-40003

GRAVIMETERS
Device for determining acceleration of gravity by interferometric measurement of travel of falling body
[NASA-CASE-XMP-05844] c14 N71-17587

GRAVITATION
Design of precision vertical alignment system using laser with gravitationally sensitive cavity
[NASA-CASE-ARC-10444-1] c16 N73-33397
Anti-gravity device
[NASA-CASE-MPS-22758-1] c70 N75-26789

GRAVITATIONAL CONSTANT
Gravity device for accurate and rapid indication of relative gravity conditions aboard accelerating carrier
[NASA-CASE-XMP-00424] c11 N70-38196

GRAVITATIONAL EFFECTS
Gravity environment simulation by locomotion and restraint aid for studying manual operation performance of astronauts at zero gravity
[NASA-CASE-ARC-10153] c05 N71-28619
Rotary plant growth accelerating apparatus --- weightlessness
[NASA-CASE-ARC-10722-1] c51 N75-25503

GRAVITATIONAL FIELDS
Difference indicating circuit used in conjunction with device measuring gravitational fields
[NASA-CASE-XNP-08274] c10 N71-13537

GRAVITY GRADIENT SATELLITES
Stabilization system for gravity-oriented satellites using single damper rod
[NASA-CASE-XAC-01591] c31 N71-17729
Method of stationkeeping for lenticular gravity gradient satellites
[NASA-CASE-XLA-03132] c31 N71-22969

GRAVITY GRADIENTMETERS
Gravity device for accurate and rapid indication of relative gravity conditions aboard accelerating carrier
[NASA-CASE-XMP-00424] c11 N70-38196
Gravity gradient attitude control system with gravity gradiometer and reaction wheels for artificial satellite attitude control
[NASA-CASE-GSC-10555-1] c21 N71-27324

GRIDS
Method of making dished ion thruster grids
[NASA-CASE-LEW-11694-1] c20 N75-18310
Apparatus for forming dished ion thruster grids
[NASA-CASE-LEW-11694-2] c37 N76-14461
Method of constructing dished ion thruster grids to provide hole array spacing compensation
[NASA-CASE-LEW-11876-1] c20 N76-21276

Solar cell grid patterns
[NASA-CASE-NFO-13087-2] c44 N76-31666

GRINDING (MATERIAL REMOVAL)
Laser device for removing material from rotating object for dynamic balancing
[NASA-CASE-MPS-11279] c16 N71-20400
Grinding mixtures of powdered metals and inert fillers for conversion to halide
[NASA-CASE-LEW-10450-1] c15 N72-25448

GRINDING MACHINES
Grinding arrangement for ball nose milling cutters
[NASA-CASE-LAR-10450-1] c37 N74-27905

GROOVES
Nonreusable energy absorbing device comprising ring member with plurality of recesses, cutting members, and guide member mounted in each recess
[NASA-CASE-XMP-10040] c15 N71-22877
Spiral groove seal --- for hydraulic rotating shaft
[NASA-CASE-LEW-10326-3] c37 N74-10474
Spiral groove seal --- for rotating shaft
[NASA-CASE-XLE-10326-4] c37 N74-15125
Splash groove fuel injector
[NASA-CASE-LEW-12417-1] c07 N76-22198

GROUND EFFECT MACHINES
Hovering type flying vehicle design and principle mechanisms for manned or unmanned use
[NASA-CASE-HSC-12111-1] c02 N71-11039
Platform with several ground effect pads and plenum chambers
[NASA-CASE-MPS-14685] c31 N71-15689
Design and development of active control system for air cushion vehicle to reduce or eliminate effects of excessive vertical vibratory acceleration
[NASA-CASE-LAR-10531-1] c02 N73-13023
Open tube guideway for high speed air cushioned vehicles
[NASA-CASE-LAR-10256-1] c85 N74-34672

GROUND HANDLING
Supporting and protecting frame structure and plug for empty thrust chamber assembly, handling, and shipping
[NASA-CASE-XMP-00580] c11 N70-35383

GROUND STATIONS
Traffic control system for supersonic transports using synchronous satellite for data relay between vehicles and ground station
[NASA-CASE-GSC-10087-1] c02 N71-19287
Spacecraft transponder and ground station radar system for mapping planetary surfaces
[NASA-CASE-NFO-11001] c07 N72-21118
Ultra stable frequency distribution system
[NASA-CASE-NPO-13836-1] c32 N76-31373

GROUND SUPPORT EQUIPMENT
Equipment for testing of ground station ranging equipment and spacecraft transponders
[NASA-CASE-XMS-05454-1] c07 N71-12391
Controlled release device for use in launching rockets or missiles
[NASA-CASE-IRS-03338] c15 N71-24043

GROUND-AIR-GROUND COMMUNICATIONS
Fabry-Perot interferometer retrodirective reflector modulator for optical communication
[NASA-CASE-XGS-04480] c16 N69-27491
Closed loop radio communication ranging system to determine distance between moving airborne vehicle and fixed ground station
[NASA-CASE-XNP-01501] c21 N70-41930
Location identification system with ground based transmitter and aircraft borne receiver/decoder
[NASA-CASE-BIC-10324] c07 N72-25173

GROUP VELOCITY
Swept group delay measurement
[NASA-CASE-NFO-13909-1] c33 N77-17358

GUIDANCE (NOTION)
Hovering type flying vehicle design and principle mechanisms for manned or unmanned use
[NASA-CASE-HSC-12111-1] c02 N71-11039
Development of adjustable attitude guide block for setting pins perpendicular to irregular convex work surface
[NASA-CASE-XLA-07911] c15 N71-15571
Longitudinal film gate and lock mechanism for securing film in motion picture cameras under vibration and high acceleration loads
[NASA-CASE-LAR-10686] c14 N71-28935

GUIDANCE SENSORS

SUBJECT INDEX

- Combination guide and rotary bearing for freely moving shaft
[NASA-CASE-XLA-00013] c15 N71-29136
- Guide member for stabilizing cable of open shaft elevator
[NASA-CASE-KSC-10513] c15 N72-25453
- GUIDANCE SENSORS**
- Light sensitive digital aspect sensor for attitude control of earth satellites or space probes
[NASA-CASE-XGS-00359] c14 N70-34158
- Guidance analyzer having suspended spacecraft simulating sphere for astronavigation
[NASA-CASE-XNP-09572] c14 N71-15621
- Optical gauging system for monitoring machine tool alignment
[NASA-CASE-XAC-09489-1] c15 N71-26673
- Development of light sensing system for controlled orientation of object relative to sun or other light source
[NASA-CASE-NFO-11311] c14 N72-25414
- Sun direction detection system
[NASA-CASE-NFO-13722-1] c74 N77-22951
- GUN LAUNCHERS**
- Self-obturator gas-operated launcher for launching projectiles in decontaminated medium
[NASA-CASE-NPO-11013] c11 N72-22247
- GUN PROPELLANTS**
- Nitramine propellants
[NASA-CASE-NPO-14103-1] c28 N77-25346
- GUNN EFFECT**
- Voltage tunable Gunn effect semiconductor for microwave generation
[NASA-CASE-XER-07894] c09 N71-18721
- Gunn effect microwave diodes with RF shielding
[NASA-CASE-ERC-10119] c26 N72-21701
- Multiterminal Gunn-type semiconductor microwave generator for producing stable signals
[NASA-CASE-XER-07895] c26 N72-25679
- Microwave generator using Gunn effect for magnetic tuning
[NASA-CASE-NPO-12106] c09 N73-15235
- GUNS**
- Method of peening and portable peening gun
[NASA-CASE-MFS-23047-1] c37 N76-18454
- GYRATORS**
- Design of gyrator circuit using operational amplifiers to replace ungrounded inductors
[NASA-CASE-XAC-10608-1] c09 N71-12517
- Gyrator circuit using MOS field effect transistors
[NASA-CASE-MFS-21433] c09 N73-20232
- Integrated P-channel MOS gyrator
[NASA-CASE-MFS-22343-1] c33 N74-34638
- Integrable power gyrator --- with Z-matrix design using parallel transistors
[NASA-CASE-MFS-22342-1] c33 N75-30428
- GYROSCOPES**
- Externally pressurized air bearing for gyros operating in high temperature, low gravity environments
[NASA-CASE-XMF-00515] c15 N70-34664
- Air bearings for spacecraft gyros
[NASA-CASE-XMF-00339] c15 N70-39896
- Development of spacecraft experiment pointing and attitude control system
[NASA-CASE-XLA-05464] c21 N71-14132
- Temperature compensated digital inertial sensor --- circuit for maintaining inertial element of gyroscope or accelerometer at constant position
[NASA-CASE-NFO-13044-1] c35 N74-15094
- All sky pointing attitude control system
[NASA-CASE-ARC-10716-1] c35 N77-20399
- GYROSTABILIZERS**
- Passive dual spin misalignment compensators --- gyrostabilized device
[NASA-CASE-GSC-11479-1] c35 N74-28097
- Angular momentum control device used for stabilization of space vehicles and the like
[NASA-CASE-LAR-11051-1] c15 N76-14158
- HAFNIUM**
- Thermal shock resistant hafnia ceramic materials
[NASA-CASE-LAR-10894-1] c18 N73-14584
- HALIDES**
- Grinding mixtures of powdered metals and inert fillers for conversion to halide
[NASA-CASE-LEW-10450-1] c15 N72-25448
- Zinc-halide battery with molten electrolyte
[NASA-CASE-NFO-11961-1] c44 N76-18643
- HALL EFFECT**
- Current measurement by use of Hall effect generator
[NASA-CASE-XAC-01662] c14 N71-23037
- Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
[NASA-CASE-MFS-20385] c09 N71-24904
- Development of Hall effect transducer for converting mechanical shaft rotations into proportional electrical signals
[NASA-CASE-LAR-10620-1] c09 N72-25255
- Speed control system for dc motor equipped with brushless Hall effect device
[NASA-CASE-MFS-20207-1] c09 N73-32107
- Hall effect magnetometer
[NASA-CASE-LEW-11632-2] c35 N75-13213
- HALL GENERATORS**
- Current measurement by use of Hall effect generator
[NASA-CASE-XAC-01662] c14 N71-23037
- HALOGENS**
- Modification of polyurethanes with alkyl halide resins, inorganic salts, and encapsulated volatile and reactive halogen for fuel fire control
[NASA-CASE-ARC-10098-1] c06 N71-24739
- HAMMERS**
- Exponential horn, copper plate, magnetic hammer, and anvil in apparatus for making diamonds
[NASA-CASE-MFS-20698] c15 N72-20446
- HAND (ANATOMY)**
- Mechanically operated hand which can depress trigger using touch control device
[NASA-CASE-MFS-20413] c15 N72-21463
- Therapeutic hand exerciser
[NASA-CASE-LAR-11667-1] c52 N76-19785
- Compact artificial hand
[NASA-CASE-NPO-13906-1] c54 N77-32723
- HANDLING EQUIPMENT**
- Supporting and protecting frame structure and plug for empty thrust chamber assembly, handling, and shipping
[NASA-CASE-XMF-00580] c11 N70-35383
- Handling tool for printed circuit cards
[NASA-CASE-MFS-20453] c15 N71-29133
- Collapsible corrugated horn antenna
[NASA-CASE-LAR-11745-1] c32 N77-24339
- HARDENING (MATERIALS)**
- Method of heat treating age-hardenable alloys
[NASA-CASE-XNP-01311] c26 N75-29236
- HARMONIC GENERATORS**
- Wideband generator for producing sine wave quadrature and second harmonic of input signal
[NASA-CASE-NPO-11133] c10 N72-20223
- HARNESSES**
- Helmet and torso tiedown mechanism for shortening pressure suits upon inflation
[NASA-CASE-XMS-00784] c05 N71-12335
- One hand backpack harness
[NASA-CASE-LAR-10102-1] c05 N72-23085
- Shoulder harness and lap belt restraint system
[NASA-CASE-ARC-10519-2] c05 N75-25915
- HATCHES**
- Design and specifications of emergency escape system for spacecraft structures
[NASA-CASE-MSC-12086-1] c05 N71-12345
- HEART**
- EKG and ultrasonoscope display
[NASA-CASE-ARC-10994-2] c52 N77-15619
- HEART FUNCTION**
- Development of instantaneous reading tachometer for measuring electrocardiogram signal rate
[NASA-CASE-MFS-20418] c14 N73-24473
- Ultrasonic biomedical measuring and recording apparatus --- for recording motion of internal organs such as heart valves
[NASA-CASE-ARC-10597-1] c52 N74-20726
- HEART RATE**
- Digital cardiometer incorporating circuit for measuring heartbeat rate of subject over predetermined portion of one minute also converting rate to beats per minute
[NASA-CASE-XMS-02399] c05 N71-22896
- Development of instantaneous reading tachometer for measuring electrocardiogram signal rate

SUBJECT INDEX

HEAT SHIELDING

- [NASA-CASE-MFS-20418] c14 N73-24473
Digital computing cardiometer
[NASA-CASE-MFS-20284-1] c52 N74-12778
- HEAT**
Thermionic converter for converting heat energy directly into electrical energy
[NASA-CASE-XLE-01903] c22 N71-23599
- HEAT EXCHANGERS**
Electrothermal rocket engine using resistance heated heat exchanger
[NASA-CASE-XLE-00267] c28 N70-33356
Space suit body heat exchanger design composed of thermal conductance yarn and liquid coolant loops
[NASA-CASE-XMS-05571] cC5 N71-19439
Dual solid cryogenics for spacecraft refrigeration insuring low temperature cooling for extended periods
[NASA-CASE-GSC-10188-1] c23 N71-24725
Shell-side liquid metal boiler employing tube and shell heat exchanger
[NASA-CASE-NPO-10831] c33 N72-20915
Heat exchanger and decontamination system for multistage refrigeration unit
[NASA-CASE-NPO-10634] c23 N72-25619
Heat exchanger --- rocket combustion chambers and cooling systems
[NASA-CASE-LEW-12252-1] c34 N75-19579
A heat exchanger and method of making
[NASA-CASE-LEW-12441-1] c34 N75-19580
Condensate removal device for heat exchanger
[NASA-CASE-MSC-14143-1] c77 N75-20139
Heat exchanger system and method
[NASA-CASE-LAR-10799-2] c34 N76-17317
Heat transfer device
[NASA-CASE-MFS-22938-1] c34 N76-18374
Heat exchanger
[NASA-CASE-MFS-22991-1] c34 N77-10463
A thermal energy transformer
[NASA-CASE-NFO-14058-1] c44 N77-30616
Flat-plate heat pipe
[NASA-CASE-GSC-11998-1] c34 N77-32413
- HEAT FLUX**
Heat flux sensor assembly with proviso for heat shield to reduce radiative transfer between sensor elements
[NASA-CASE-XMS-05909-1] c14 N69-27459
Heat flux sensor adapted for mounting on aircraft or spacecraft to measure aerodynamic heat flux inflow to aircraft skin
[NASA-CASE-XFR-03802] c33 N71-23085
Radial heat flux transformer for use in heating and cooling processes
[NASA-CASE-NPO-11828] c33 N72-17948
- HEAT MEASUREMENT**
Electromagnetic energy detection by thermal sensor with vibrating electrode
[NASA-CASE-XAC-10768] c09 N71-18830
Specific wavelength colorimeter --- for measuring given solute concentration in test sample
[NASA-CASE-MSC-14081-1] c35 N74-27860
- HEAT PIPES**
Electric power system utilizing thermionic plasma diodes in parallel and heat pipes as cathodes
[NASA-CASE-XMP-05843] c03 N71-11055
Microwave power receiving antenna solving heat dissipation problems by construction of elements as heat pipe devices
[NASA-CASE-MFS-20333] c09 N71-13486
Double-wall isothermal cylinder containing heat transfer fluid thermal reservoir as spacecraft insulation cover
[NASA-CASE-MFS-20355] c33 N71-25353
Structural heat pipe --- for spacecraft wall thermal insulation system
[NASA-CASE-GSC-11619-1] c34 N75-12222
Method of forming a wick for a heat pipe
[NASA-CASE-NPO-13391-1] c34 N76-27515
Production of I-123
[NASA-CASE-LEW-11390-3] c25 N76-29379
- HEAT PUMPS**
Thermal pump-compressor for converting solar energy
[NASA-CASE-XLA-00377] c33 N71-17610
Manually activated heat pump for mechanically converting human operator output into heat energy
- [NASA-CASE-NFO-10677] c05 N72-11084
Design and development of thermomechanical pump for transmitting working fluid through fluid circuit to control temperature of spacecraft instrumentation
[NASA-CASE-NFO-11417] c15 N73-29513
Magnetic heat pumping
[NASA-CASE-LEW-12508-1] c34 N77-15343
Magnetic heat pumping
[NASA-CASE-LEW-12508-2] c34 N77-32435
- HEAT RADIATORS**
Capillary radiator for carrying heat transfer liquid in planetary spacecraft structures
[NASA-CASE-XLE-03307] c33 N71-14035
Hydraulic actuator design for space deployment of heat radiators
[NASA-CASE-MSC-11817-1] c15 N71-26611
Development of method and equipment for testing heat radiative properties of material under controlled environmental conditions
[NASA-CASE-MFS-20096] c14 N71-30026
- HEAT RESISTANT ALLOYS**
Preparation of nickel alloys for jet turbine blades operating at high temperatures
[NASA-CASE-XLE-00151] c17 N70-33283
Nickel alloy series for aerospace structures subjected to high temperatures
[NASA-CASE-XLE-00283] c17 N70-36616
High temperature cobalt-base alloy resistant to corrosion by liquid metals and to sublimation in vacuum environment
[NASA-CASE-XLE-02991] c17 N71-16025
Brazing alloy adapted for brazing corrosion resistant steel to refractory metals, also for brazing refractory metals to other refractory metals
[NASA-CASE-XMP-03063] c17 N71-23365
Superalloys from prealloyed powders at high temperatures
[NASA-CASE-LEW-10805-1] c15 N73-13465
Method of making pressure tight seal for super alloy
[NASA-CASE-LAR-10170-1] c37 N74-11301
Method of forming articles of manufacture from superalloy powders
[NASA-CASE-LEW-10805-2] c37 N74-13179
Refractory porcelain enamel passive control coating for high temperature alloys
[NASA-CASE-MFS-22324-1] c27 N75-27160
Cement composition and method of fabrication --- heat resistant alloys and powders
[NASA-CASE-NFO-13120-1] c27 N76-15311
Metallic hot wire anemometer --- for high speed wind tunnel tests
[NASA-CASE-ARC-10911-1] c35 N77-20400
Method of growing composites of the type exhibiting the Soret effect --- improved structure of eutectic alloy crystals
[NASA-CASE-MFS-22926-1] c24 N77-27187
Directionally solidified eutectic gamma plus beta nickel-base superalloys
[NASA-CASE-LEW-12906-1] c26 N77-32279
Nickel base alloy --- for gas turbine engine stator vanes
[NASA-CASE-LEW-12270-1] c26 N77-32280
- HEAT SHIELDING**
Heat flux sensor assembly with proviso for heat shield to reduce radiative transfer between sensor elements
[NASA-CASE-XMS-05909-1] c14 N69-27459
Oven for heat treating heat shields
[NASA-CASE-XMS-04318] c15 N69-27871
Compact heat shielding for interplanetary space vehicles
[NASA-CASE-XMS-00486] c33 N70-33344
Sandwich panel structure for removing heat from shield between hot and cold areas
[NASA-CASE-XLA-00349] c33 N70-37979
Aerodynamic configuration of reentry vehicle heat shield to provide longitudinal and directional stability at hypersonic velocities
[NASA-CASE-XMS-04142] c31 N70-41631
Transpirationally cooled heat ablation system for interplanetary spacecraft reentry shielding
[NASA-CASE-XMS-02677] c31 N70-42075
Synthesis of azine polymers for heat shields by azine-aromatic aldehyde reaction
[NASA-CASE-XMP-08656] c06 N71-11242

- Synthesis of Schiff bases for heat shields by acetal amine reactions
[NASA-CASE-XMF-08652] c06 N71-11243
- Preparation and characteristics of lightweight refractory insulation
[NASA-CASE-XMF-05279] c18 N71-16124
- Development and characteristics of thermal radiation shielding of refractory metal foil used for induction furnace
[NASA-CASE-XLE-03432] c33 N71-24145
- Design and development of spacecraft with outer shell structure heat shielding and built-in, removable excursion module
[NASA-CASE-MSC-13047-1] c31 N71-25434
- Structure of fabric layers for micrometeoroid protection garment with capability for eliminating heat shorts for use in manufacturing space suits
[NASA-CASE-MSC-12109] c18 N71-26285
- Thermal insulation protection means
[NASA-CASE-MSC-12737-1] c34 N77-22423
- Thermal insulation attaching means --- adhesive bonding of felt vibration isolators under ceramic tiles
[NASA-CASE-MSC-12619-2] c16 N77-31237
- HEAT SINKS**
- Thermal conductive, electrically insulated cleavable adhesive connection between electronic module and heat sink
[NASA-CASE-XMS-02087] c09 N70-41717
- Development and characteristics of calorimeter with integral heat sink for maintenance of constant temperature
[NASA-CASE-XMF-04208] c33 N71-29051
- Electroexplosive device
[NASA-CASE-NFO-13858-1] c28 N77-17258
- Tubular sublimatory evaporator heat sink
[NASA-CASE-ARC-10912-1] c34 N77-19353
- Compact pulsed laser having improved heat conductance
[NASA-CASE-NFO-13147-1] c36 N77-25502
- HEAT SOURCES**
- Black body radiometer design with temperature sensing and cavity heat source cone winding
[NASA-CASE-XNP-09701] c14 N71-26475
- Thermally cascaded thermoelectric generator with radionuclides heat source
[NASA-CASE-NFO-10753] c03 N72-26031
- Protected isotope heat source --- for atmospheric reentry protection and heat transmission to spacecraft
[NASA-CASE-LEW-11227-1] c73 N75-30876
- HEAT STORAGE**
- Solar energy trap
[NASA-CASE-MFS-22744-1] c44 N76-24696
- Portable, linear-focused solar thermal energy collecting system
[NASA-CASE-NFO-13734-1] c44 N76-26690
- Thermal energy storage system --- operating on superheating of liquids
[NASA-CASE-MFS-22167-1] c44 N76-31667
- HEAT TRANSFER**
- Thermal switch for transferring excess heat from one region to another heat dissipating one
[NASA-CASE-XNP-00463] c33 N70-36847
- Sandwich panel structure for removing heat from shield between hot and cold areas
[NASA-CASE-XLA-00349] c33 N70-37979
- Apparatus for cryogenic liquid storage with heat transfer reduction and for liquid transfer at zero gravity conditions
[NASA-CASE-XLE-00345] c15 N70-38020
- Method for improving heat transfer characteristics in nucleate boiling process
[NASA-CASE-XMS-04268] c33 N71-16277
- Design and development of device for cooling inner conductor of coaxial cable
[NASA-CASE-XNP-05775] c09 N71-20445
- Heat sensing instrument, using thermocouple junction connected under heavy conducting material
[NASA-CASE-XLA-01551] c14 N71-22989
- Mixed liquid and vapor phase analyzer design with thermocouples for relative heat transfer measurement
[NASA-CASE-NFO-10691] c14 N71-26199
- Development and characteristics of cooling system to maintain temperature of rack mounted electronic modules
[NASA-CASE-MSC-12389] c33 N71-29052
- Development of method and equipment for testing heat radiative properties of material under controlled environmental conditions
[NASA-CASE-MFS-20096] c14 N71-30026
- Manually activated heat pump for mechanically converting human operator output into heat energy
[NASA-CASE-NFO-10677] c05 N72-11084
- High intensity radiant energy pulse source for calibrating heat transfer gages with thermoluminescent shutter activation
[NASA-CASE-ARC-10178-1] c09 N72-17152
- Development of thermocouple instrument for measuring temperature of wall heated by flowing fluid without disturbing boundary layer
[NASA-CASE-XLE-05230] c14 N72-27410
- Development and characteristics of thermal control system for maintaining constant temperature within spacecraft module with wide variations of component heat transfer
[NASA-CASE-GSC-11018-1] c31 N73-30829
- Thermal flux transfer system for maintaining thrust chamber of operative reaction motor at given temperatures
[NASA-CASE-NFO-12070-1] c28 N73-32606
- Electrostatically controlled heat transfer system for conducting thermal energy
[NASA-CASE-NFO-11942-1] c33 N73-32818
- Heat transfer device
[NASA-CASE-NFO-11120-1] c34 N74-18552
- Heat exchanger
[NASA-CASE-MFS-22991-1] c34 N77-10463
- HEAT TRANSMISSION**
- Heat flow calorimeter --- measures output of Ni-Cd batteries
[NASA-CASE-GSC-11434-1] c34 N74-27859
- Protected isotope heat source --- for atmospheric reentry protection and heat transmission to spacecraft
[NASA-CASE-LEW-11227-1] c73 N75-30876
- HEAT TREATMENT**
- High speed infrared furnace
[NASA-CASE-XLE-10466] c17 N69-25147
- Oven for heat treating heat shields
[NASA-CASE-XMS-04318] c15 N69-27871
- Vacuum method for molding thermosetting compounds used as ablative materials
[NASA-CASE-XLA-01091] c15 N71-10672
- Production of refractory bodies with controlled porosity by pressing and heating mixtures of refractory and inert metal powders
[NASA-CASE-LEW-10393-1] c17 N71-15468
- White paint production by heating impure aluminum silicate clay having low solar absorptance
[NASA-CASE-XNP-02139] c18 N71-24184
- Method for diffusion welding dissimilar metals in vacuum chamber
[NASA-CASE-GSC-10303] c15 N72-22487
- Method of heat treating a formed powder product material
[NASA-CASE-LEW-10805-3] c26 N74-10521
- Diffusion welding --- heat treatment of nickel alloys following single step vacuum welding process
[NASA-CASE-LEW-11388-2] c37 N74-21055
- Heat sterilizable patient ventilator
[NASA-CASE-NFO-13313-1] c54 N75-27761
- Method of heat treating age-hardenable alloys
[NASA-CASE-XNP-01311] c26 N75-29236
- Method for detecting pollutants --- through chemical reactions and heat treatment
[NASA-CASE-LAR-11405-1] c45 N76-31714
- HEATERS**
- Reliable electrical element heater using plural wire system and backup power sources
[NASA-CASE-MFS-21462-1] c33 N74-14935
- HEATING**
- Development of system for preheating vaporized fuel for use with internal combustion engines
[NASA-CASE-NFO-12072] c28 N72-22772
- Diffusion welding in air --- solid state welding of butt joint by fusion welding, surface cleaning, and heating
[NASA-CASE-LEW-11387-1] c37 N74-18128
- HEATING EQUIPMENT**
- Using heat control unit to preheat circulating fluid

- [NASA-CASE-IMP-04237] c33 N71-16278
Electric arc heater with supersonic nozzle and fixed arc length for use in high temperature wind tunnels
- [NASA-CASE-XAC-01677] c09 N71-20816
Radial heat flux transformer for use in heating and cooling processes
- [NASA-CASE-NFO-10828] c33 N72-17948
Self-cycling fluid heater for heating continuous fluid stream to ultrahigh temperatures to facilitate chemical reactions
- [NASA-CASE-MSC-15567-1] c33 N73-16918
HELICAL ANTENNAS
Weatherproof helix antenna
- [NASA-CASE-IKS-08485] c07 N71-19493
Collapsible high gain antenna which can be automatically expanded to operating state
- [NASA-CASE-KSC-10392] c07 N73-26117
HELICOPTER DESIGN
Automatically lockable axially extensible strut --- for helicopters
- [NASA-CASE-LAR-11900-1] c05 N77-18134
HELICOPTER WAKES
Variable geometry rotor system for direct control over wake vortex
- [NASA-CASE-LAR-10557] c02 N72-11018
HELICOPTERS
Hingeless helicopter rotor with improved stability
- [NASA-CASE-ARC-10807-1] c05 N77-17029
Nondestructive method for instrumenting helicopter rotor blades
- [NASA-CASE-LAR-11201-1] c35 N77-22452
Constant lift rotor for a heavier than air craft
- [NASA-CASE-ARC-11045-1] c05 N77-28111
HELIUM
Helium refining by superfluidity
- [NASA-CASE-IMP-00733] c06 N70-34946
Apparatus and method capable of receiving large quantity of high pressure helium, removing impurities, and discharging at received pressure
- [NASA-CASE-IMP-06888] c15 N71-24044
Method and apparatus for generating coherent radiation in the ultra-violet region and above by use of distributed feedback
- [NASA-CASE-NFO-13346-1] c36 N76-29575
Cryostat system for temperatures on the order of 2 deg K or less
- [NASA-CASE-NFO-13459-1] c31 N77-10229
Stabilization of He₂(a-3 Sigma⁺) molecules in liquid helium by optical pumping for vacuum UV laser
- [NASA-CASE-NFO-13993-1] c36 N77-24468
HELIUM IONS
Charge transfer reaction laser with preionization means
- [NASA-CASE-NFO-13945-1] c36 N77-19418
HELIUM-NEON LASERS
Design and development of multichannel laser remote control system using modulated helium-neon laser as transmitter and light collector as receiving antenna
- [NASA-CASE-LAR-10311-1] c16 N73-16536
HELMETS
Transparent polycarbonate resin, shell helmet and latch design for high altitude and space flight
- [NASA-CASE-XMS-04935] c05 N71-11190
Electrode attached to helmets for detecting low level signals from skin of living creatures
- [NASA-CASE-ARC-10043-1] c05 N71-11193
Venting device for pressurized space suit helmet to eliminate vomit expelled by crewmen
- [NASA-CASE-XMS-09652-1] c05 N71-26333
HEMISPHERICAL SHELLS
Light baffle with oblate hemispheroid surface and shading flange
- [NASA-CASE-NFO-10337] c14 N71-15604
HERMETIC SEALS
Piston in bore cutter for severing parachute control lines and sealing cable hole to prevent water leakage into load
- [NASA-CASE-XMS-04072] c15 N70-42017
Hermetically sealed explosive release mechanism for actuator device
- [NASA-CASE-XGS-00824] c15 N71-16078
Sealing apparatus for joining two pieces of frangible materials
- [NASA-CASE-XLA-01494] c15 N71-24164
Method for locating leaks in hermetically sealed containers
- [NASA-CASE-ZEC-10045] c15 N71-24910
Hermetically sealed vibration damper design for use in gimbal assembly of spacecraft inertial guidance system
- [NASA-CASE-MSC-10959] c15 N71-26243
Method of forming ceramic to metal seals impervious to gaseous and liquid mercury at high temperature
- [NASA-CASE-IMP-01263-2] c15 N71-26312
Pressure seals suitable for use in environmental test chambers
- [NASA-CASE-NFO-10796] c15 N71-27068
Hermetic sealing device for ends of tubular bodies during materials testing operations
- [NASA-CASE-NFO-10431] c15 N71-29132
Hermetically sealed elbow actuator for use in severe environments
- [NASA-CASE-MFS-14710] c09 N72-22195
Heat transfer device
- [NASA-CASE-NFO-11120-1] c34 N74-18552
Device for tensioning test specimens within an hermetically sealed chamber
- [NASA-CASE-MFS-23281-1] c35 N77-22450
HEXOKINASE
Use of enzyme hexokinase and glucose to reduce inherent light levels of ATP in luciferase compositions
- [NASA-CASE-XGS-05533] c04 N69-27487
HIGH ACCELERATION
Astronaut restraint suit for high acceleration protection
- [NASA-CASE-XAC-00405] c05 N70-41819
HIGH ALTITUDE
Compact bellows spirometer for high speed and high altitude space travel
- [NASA-CASE-XAR-01547] c05 N69-21473
HIGH ALTITUDE ENVIRONMENTS
Method of making solid propellant rocket motor having reliable high altitude capabilities, long shelf life, and capable of firing with nozzle closure with foamed plastic permanent mandrel
- [NASA-CASE-XLA-04126] c28 N71-26779
HIGH ASPECT RATIO
Aerospace configuration with low and high aspect ratio variability for high and low speed flight
- [NASA-CASE-XLA-00142] c02 N70-33286
Aerodynamic configuration for aircraft capable of high speed flight and low drag for low speed takeoff or landing upon presently existing airfields
- [NASA-CASE-XLA-00806] c02 N70-34858
HIGH CURRENT
High voltage, high current Schottky barrier solar cell
- [NASA-CASE-NFO-13482-1] c44 N74-30448
HIGH FREQUENCIES
Apparatus for ballasting high frequency transistors
- [NASA-CASE-XGS-05003] c09 N69-24318
Holder for high frequency crystal resonators
- [NASA-CASE-IMP-03637] c15 N71-21311
Multiple varactor for generating high frequencies with high power and high conversion efficiency
- [NASA-CASE-IMP-04958-1] c10 N71-26414
HIGH PASS FILTERS
Radio frequency coaxial filter to provide dc isolation and low frequency signal rejection in audio range
- [NASA-CASE-XGS-01418] c09 N71-23573
HIGH POLYMERS
Shock and vibration damping device using temperature sensitive solid amorphous polymers
- [NASA-CASE-XAC-11225] c14 N69-27486
HIGH PRESSURE
High-temperature, high-pressure spherical segment valve
- [NASA-CASE-XAC-00074] c15 N70-34817
High pressure four-way valve with O ring adapted to pass across inlet port
- [NASA-CASE-IMP-00214] c15 N70-36908
Compact high pressure filter for rocket fuel lines
- [NASA-CASE-IMP-00732] c28 N70-41447
Antiflutter check valve for use with high pressure fluid flow
- [NASA-CASE-IMP-01152] c15 N70-41811

- High pressure liquid flow sight assembly for wide temperature range applications including cryogenic fluids
[NASA-CASE-XLE-02998] c14 N70-42074
- Structural design of high pressure regulator valve
[NASA-CASE-XNP-0071C] c15 N71-10778
- Hypersonic test facility for studying ablation in models under high pressure and high temperature
[NASA-CASE-XLA-00378] c11 N71-15925
- Development and characteristics of high pressure control valve
[NASA-CASE-FSC-11010] c15 N71-19485
- Valve seat with resilient support ring for venting valves subjected to high pressure sealing loads
[NASA-CASE-XKS-02582] c15 N71-21234
- Apparatus and method capable of receiving large quantity of high pressure helium, removing impurities, and discharging at received pressure
[NASA-CASE-XMF-06888] c15 N71-24044
- Liquid aerosol dispenser with explosively driven piston to compress light gas to extremely high pressure
[NASA-CASE-MFS-20829] c12 N72-21310
- Shaft seal assembly for high speed and high pressure applications
[NASA-CASE-LEW-11873-1] c37 N77-27404
- HIGH RESOLUTION**
- High resolution radar transmitting system for transmitting optical pulses to targets
[NASA-CASE-NPO-11426] c07 N73-26119
- High resolution Fourier interferometer-spectrophotopolarimeter
[NASA-CASE-NPO-13604-1] c35 N76-31490
- HIGH SPEED**
- Compact bellows spirometer for high speed and high altitude space travel
[NASA-CASE-IAR-01547] c05 N69-21473
- High speed low level voltage commutating switch
[NASA-CASE-IAC-00060] c09 N70-39915
- Impact testing machine for imparting large impact forces on high velocity packages
[NASA-CASE-XNP-04817] c14 N71-23225
- Flow meter for measuring stagnation pressure in boundary layer around high speed flight vehicle
[NASA-CASE-IFR-02007] c12 N71-24692
- Method for reducing mass of ball bearings for long life operation at high speed
[NASA-CASE-LEW-10856-1] c15 N72-22490
- Two stage light gas-plasma projectile accelerator
[NASA-CASE-MFS-22287-1] c75 N76-14931
- Selective data segment monitoring system --- using shift registers
[NASA-CASE-ARC-10899-1] c60 N77-19760
- Shaft seal assembly for high speed and high pressure applications
[NASA-CASE-LEW-11873-1] c37 N77-27404
- HIGH SPEED CAMERAS**
- Electrically operated rotary shutter for television camera aboard spacecraft
[NASA-CASE-XNP-00637] c14 N70-40273
- HIGH STRENGTH**
- Method for making fiber composites with high strength at high temperatures
[NASA-CASE-LEW-10424-2-2] c18 N72-25539
- HIGH STRENGTH ALLOYS**
- High strength, corrosion resistant cobalt-based alloys for aerospace structures
[NASA-CASE-XLE-00726] c17 N71-15644
- High strength aluminum casting alloy for cryogenic applications in aerospace engineering
[NASA-CASE-XMF-02786] c17 N71-20743
- Production of high strength refractory compounds and microconstituents into refractory metal matrix
[NASA-CASE-XLE-03940] c18 N71-26153
- High strength nickel based alloys
[NASA-CASE-LEW-10874-1] c17 N72-22535
- Cobalt-tungsten alloys with superior strength at elevated temperatures
[NASA-CASE-LEW-10436-1] c17 N73-32415
- HIGH STRENGTH STEELS**
- Prevention of hydrogen embrittlement of high strength steel by hydrazine compositions --- by adding potassium hydroxide to hydrazine
[NASA-CASE-NFO-12122-1] c24 N76-14203
- High toughness-high strength iron alloy
[NASA-CASE-LEW-12542-1] c26 N77-24254
- HIGH TEMPERATURE**
- High temperature source of thermal radiation
[NASA-CASE-XLE-00490] c33 N70-34545
- Thermionic diode switch for use in high temperature region to chop current from dc source
[NASA-CASE-NPO-10404] c03 N71-12255
- Hypersonic test facility for studying ablation in models under high pressure and high temperature
[NASA-CASE-XLA-00378] c11 N71-15925
- Process for fiberizing ceramic materials with high fusion temperatures and tensile strength
[NASA-CASE-XNP-00597] c18 N71-23088
- Induction heating of metallurgical specimens to high temperatures in coil furnace
[NASA-CASE-XLE-04026] c14 N71-23267
- Method of forming ceramic to metal seals impervious to gaseous and liquid mercury at high temperature
[NASA-CASE-XNP-01263-2] c15 N71-26312
- Method for making fiber composites with high strength at high temperatures
[NASA-CASE-LEW-10424-2-2] c18 N72-25539
- Superalloys from prealloyed powders at high temperatures
[NASA-CASE-LEW-10805-1] c15 N73-13465
- High temperature beryllium oxide capacitor
[NASA-CASE-LEW-11938-1] c33 N76-15373
- Low to high temperature energy conversion system
[NASA-CASE-NPO-13510-1] c44 N77-32581
- HIGH TEMPERATURE AIR**
- Apparatus and method for generating large mass flow of high temperature air at hypersonic speeds
[NASA-CASE-IAR-10612-1] c12 N73-28144
- HIGH TEMPERATURE ENVIRONMENTS**
- High speed infrared furnace
[NASA-CASE-XLE-10466] c17 N69-25147
- Nickel alloy series for aerospace structures subjected to high temperatures
[NASA-CASE-XLE-00283] c17 N70-36616
- Water cooled gage for strain measurements in high temperature environments
[NASA-CASE-XNP-09205] c14 N71-17657
- Tantalum modified ferritic iron base alloys --- for use in high temperature environments
[NASA-CASE-LEW-12095-1] c26 N76-17233
- Thermocouples of molybdenum and iridium alloys for more stable vacuum-high temperature performance
[NASA-CASE-LEW-12174-1] c35 N76-19407
- Trielectrode capacitive pressure transducer
[NASA-CASE-ARC-10711-2] c33 N76-21390
- Integrated structure vacuum tube
[NASA-CASE-ARC-10445-1] c31 N76-31365
- HIGH TEMPERATURE FLUIDS**
- Self-cycling fluid heater for heating continuous fluid stream to ultrahigh temperatures to facilitate chemical reactions
[NASA-CASE-MSC-15567-1] c33 N73-16918
- HIGH TEMPERATURE GASES**
- Multiple wavelength radiation measuring instrument for determining hot body or gas temperature
[NASA-CASE-XLE-00011] c14 N70-41946
- Ablative resins used for retarding regression in ablative material
[NASA-CASE-XLE-05913] c33 N71-14032
- Transient heat transfer gage for measuring total radiant intensity from far ultraviolet and ionized high temperature gases
[NASA-CASE-XNP-09802] c33 N71-15641
- Generation of high temperature, high mass flow, and high Reynolds number air at hypersonic speeds
[NASA-CASE-IAR-10578-1] c12 N73-25262
- Isotope separation using metallic vapor lasers
[NASA-CASE-NPO-13550-1] c36 N77-26477
- HIGH TEMPERATURE LUBRICANTS**
- Production of barium fluoride-calcium fluoride composite lubricant for bearings or seals
[NASA-CASE-XLE-08511-2] c18 N71-16105
- Self lubricating fluoride-metal composite materials for outer space applications
[NASA-CASE-XLE-08511] c18 N71-23710
- HIGH TEMPERATURE PLASMAS**
- Apparatus for producing highly conductive, high temperature electron plasma with homogenous

- temperature and pressure distribution
[NASA-CASE-XLA-00147] c25 N70-34661
- HIGH TEMPERATURE PROPELLANTS**
Development of system for delivering vaporized mercury to electron bombardment ion engine
[NASA-CASE-NFO-10737] c28 N72-11709
- HIGH TEMPERATURE RESEARCH**
Gas cooled high temperature thermocouple
[NASA-CASE-XLE-09475-1] c33 N71-15568
Fatigue testing apparatus with light shield and infrared reflector for high temperature evaluation of loaded sheet samples
[NASA-CASE-XLA-01782] c14 N71-26136
High temperature oxidation resistant cermet compositions
[NASA-CASE-NFO-13666-1] c27 N77-13217
- HIGH TEMPERATURE TESTS**
High-temperature, high-pressure spherical segment valve
[NASA-CASE-XAC-00074] c15 N70-34817
Test apparatus for determining mechanical properties of refractory materials at high temperatures in vacuum or inert atmospheres
[NASA-CASE-XLE-00335] c14 N70-35368
Apparatus for testing metallic and nonmetallic beams or rods by bending at high temperatures in vacuum or inert atmosphere
[NASA-CASE-XLE-01300] c15 N70-41993
- HIGH VACUUM**
Epoxy resin sealing device for electrochemical cells in high vacuum environments
[NASA-CASE-XGS-02630] c03 N71-22974
Device for high vacuum film deposition with electromagnetic ion steering
[NASA-CASE-NFO-10331] c09 N71-26701
Absolute pressure measuring device for measuring gas density level in high vacuum range
[NASA-CASE-LAR-10000] c14 N73-30394
Thermocouples of molybdenum and iridium alloys for more stable vacuum-high temperature performance
[NASA-CASE-LEW-12174-1] c35 N76-19407
- HIGH VACUUM ORBITAL SIMULATOR**
Space environmental work simulator with portions of space suit mounted to vacuum chamber wall
[NASA-CASE-XNP-07488] c11 N71-18773
- HIGH VOLTAGES**
Hollow spherical electrode for shielding dielectric junction between high voltage conductor and insulator
[NASA-CASE-XLE-03778] c09 N69-21542
High voltage cable for use in high intensity ionizing radiation fields
[NASA-CASE-XNP-00738] c09 N70-38201
High voltage pulse generator for testing flash and ignition limits of nonmetallic materials in controlled atmospheres
[NASA-CASE-HSC-12178-1] c09 N71-13518
High voltage transistor circuit
[NASA-CASE-XNP-06937] c09 N71-19516
High voltage divider system for attenuating high voltages to convenient levels suitable for introduction to measuring circuits
[NASA-CASE-XLE-02008] c09 N71-21583
High voltage, high current Schottky barrier solar cell
[NASA-CASE-NFO-13482-1] c44 N74-30448
High voltage distributor
[NASA-CASE-GSC-11849-1] c33 N76-16332
Sustained arc ignition system
[NASA-CASE-LEW-12444-1] c33 N77-28385
- HIGHWAYS**
Traffic survey system --- using optical scanners
[NASA-CASE-MFS-22631-1] c66 N76-19888
- HISTOGRAMS**
System for storing histogram data in optimum number of elements
[NASA-CASE-XNP-09785] c08 N69-21928
- HOLDERS**
Water cooled contactors for holding rotating carbon arc anode
[NASA-CASE-XMS-03700] c15 N69-24266
Quick disconnect latch and handle combination for mounting articles on walls or supporting bases in spacecraft under zero gravity conditions
[NASA-CASE-MFS-11132] c15 N71-17649
Holder for high frequency crystal resonators
[NASA-CASE-XNP-03637] c15 N71-21311
- Design and construction of mechanical probe for determining if object is properly secured
[NASA-CASE-MFS-20760] c14 N72-33377
Fifth wheel
[NASA-CASE-PRC-10081-1] c37 N77-14477
Combined docking and grasping device
[NASA-CASE-MFS-23088-1] c37 N77-23483
- HOLE DISTRIBUTION (MECHANICS)**
Thermocouple installation
[NASA-CASE-NFO-13540-1] c35 N77-14409
- HOLE MOBILITY**
Hole mobility of deposited semiconductor films in vacuum utilizing thermal gradient
[NASA-CASE-XKS-04614] c15 N69-21460
- HOLLOW CATHODES**
Dual membrane, hollow fiber fuel cell
[NASA-CASE-NFO-13732-1] c44 N77-19581
- HOLOGRAPHY**
Development of focused image holography with extended sources
[NASA-CASE-ERC-10019] c16 N71-15551
Hybrid holographic system using reference, transmitted, and reflected beams simultaneously
[NASA-CASE-MFS-20074] c16 N71-15565
Recording and reconstructing focused image holograms
[NASA-CASE-ERC-10017] c16 N71-15567
Method and means for recording and reconstructing holograms without use of reference beam
[NASA-CASE-ERC-10020] c16 N71-26154
Multiple image storing system for obtaining holographic record on film of high speed projectile
[NASA-CASE-MFS-20596] c14 N72-17324
Thin film analyzer utilizing holographic techniques
[NASA-CASE-MFS-20823-1] c16 N73-30476
Method and apparatus for checking the stability of a setup for making reflection type holograms
[NASA-CASE-MFS-21455-1] c35 N74-15146
Real time moving scene holographic camera system
[NASA-CASE-MFS-21087-1] c35 N74-17153
Holography utilizing surface plasmon resonances
[NASA-CASE-MFS-22040-1] c35 N74-26946
Holographic system for nondestructive testing
[NASA-CASE-MFS-21704-1] c35 N75-25124
Real time, large volume, moving scene holographic camera system
[NASA-CASE-MFS-22537-1] c35 N75-27328
Holographic motion picture camera with Doppler shift compensation
[NASA-CASE-MFS-22517-1] c35 N76-18402
Optical process for producing classification maps from multispectral data
[NASA-CASE-MSC-14472-1] c43 N77-10584
- HOMING DEVICES**
Location identification system with ground based transmitter and aircraft borne receiver/decoder
[NASA-CASE-ERC-10324] c07 N72-25173
- HONEYCOMB CORES**
Technique for making foldable, inflatable, plastic honeycomb core panels for use in building and bridge structures, light and radio wave reflectors, and spacecraft
[NASA-CASE-XLA-03492] c15 N71-22713
Heat treatment and tooling for forming shapes from thermosetting honeycomb core sheets
[NASA-CASE-NFO-11036] c15 N72-24522
Honeycomb core structures of minimum surface tubule sections
[NASA-CASE-ERC-10363] c18 N72-25541
- HONEYCOMB STRUCTURES**
Filling honeycomb matrix with deaerated paste filler
[NASA-CASE-XMS-01108] c15 N69-24322
Inflatable honeycomb panel element for lightweight structures usable in space stations and other construction
[NASA-CASE-XLA-00204] c32 N70-36536
Fluid flow control valve for regulating fluids in molecular quantities
[NASA-CASE-XLE-00703] c15 N71-15967
Method and apparatus for fabrication of heat insulating and ablative reentry structure
[NASA-CASE-XMS-02009] c33 N71-20834
Method for honeycomb panel bonding by thermosetting film adhesive with electrical heat means

- [NASA-CASE-XMP-01402] c18 N71-21651
Development of thermal insulation material for
insulating liquid hydrogen tanks in spacecraft
[NASA-CASE-XMP-05046] c33 N71-28892
Honeycomb panels of minimal surface, periodic
tubule layers
[NASA-CASE-BRC-10364] c18 N72-25540
Development of process for bonding resinous body
in cavities of honeycomb structures
[NASA-CASE-MSC-12357] c15 N73-12489
Insert facing tool --- manually operated cutting
tool for forming studs in honeycomb material
[NASA-CASE-MPS-21485-1] c37 N74-25968
Vacuum pressure molding technique
[NASA-CASE-LAR-10073-1] c37 N76-24575
Honeycomb-larinate composite structure
[NASA-CASE-ARC-10913-1] c24 N76-26286
Composite sandwich lattice structure
[NASA-CASE-LAR-11898-1] c24 N77-15103
Low density bismaleimide-carbon microballoon
composites
[NASA-CASE-ARC-11040-1] c24 N77-19173
- HOPPERS**
Design and development of device to prevent
clogging in hoppers containing particulate
materials
[NASA-CASE-LAR-10961-1] c15 N73-12496
- HORIZON SCANNERS**
Oscillatory electromagnetic mirror drive system
for horizon scanners
[NASA-CASE-XLA-03724] c14 N69-27461
Multi-lobe scan horizon sensor
[NASA-CASE-XGS-00809] c21 N70-35427
Attitude orientation control of spin stabilized
final stage space vehicles, using horizon
scanners
[NASA-CASE-XLA-00281] c21 N70-36943
Clamped amplifier circuit for horizon scanner
enabling amplification and accurate
measurement of specified parameters
[NASA-CASE-XGS-01784] c10 N71-20782
Horizon sensor design with digital sampling of
spaced radiation-compensated thermopile
infrared detectors
[NASA-CASE-XMP-06957] c14 N71-21088
Method and equipment for locating earth infrared
horizon from space, independent of season and
latitude
[NASA-CASE-LAR-10726-1] c14 N73-20475
- HORIZONTAL SPACECRAFT LANDING**
Delta winged, manned reentry vehicle capable of
horizontal glide landing at low speeds
[NASA-CASE-XLA-00241] c31 N70-37986
- HORIZONTAL TAIL SURFACES**
Development, and characteristics of translating
horizontal tail assembly for supersonic aircraft
[NASA-CASE-XLA-08801-1] c02 N71-11043
- HORN ANTENNAS**
Device for improving efficiency of parabolic
horn antenna system for linearly polarized
signals
[NASA-CASE-XNP-00611] c09 N70-35219
Device for improving efficiency of parabolic
reflector horn for linearly or circularly
polarized waves
[NASA-CASE-XNP-00540] c09 N70-35382
Characteristics of antenna horn feeds consisting
of central horn with overlapping peripheral
horns
[NASA-CASE-GSC-10452] c07 N71-12396
Multiple mode horn antenna with radiation
pattern of equal beamwidths and suppressed
sidelobes
[NASA-CASE-XNP-01057] c07 N71-15907
Multipurpose microwave antenna, employing dish
reflector with plural coaxial horn feeds
[NASA-CASE-NFO-11264] c07 N72-25174
Horn antenna having V-shaped corrugated slots
[NASA-CASE-LAR-11112-1] c32 N76-15330
Highly efficient antenna system using a
corrugated horn and scanning hyperbolic
reflector
[NASA-CASE-NFO-13568-1] c32 N76-21365
Reflex feed system for dual frequency antenna
[NASA-CASE-NFO-14022-1] c32 N77-24338
Collapsible corrugated horn antenna
[NASA-CASE-LAR-11745-1] c32 N77-24339
- HOT CATHODES**
Improved cathode containing barium carbonate
block and heated tungsten screen for electron
bombardment ion thruster
[NASA-CASE-XLE-07087] c06 N69-39889
- HOT PRESSING**
Cermets for nuclear fuel constructed by pressing
metal coated ceramic particles in die at
temperature to cause bonding of metal
coatings, and tested for thermal stability
[NASA-CASE-LEW-10219-1] c18 N71-28729
- HOT WORKING**
Hot forming of plastic sheets
[NASA-CASE-XMS-05516] c15 N71-17803
- HOT-WIRE ANEMOMETERS**
Metallic hot wire anemometer --- for high speed
wind tunnel tests
[NASA-CASE-ARC-10911-1] c35 N77-20400
Method for making a hot wire anemometer and
product thereof
[NASA-CASE-ARC-10900-1] c35 N77-24454
- HOT-WIRE FLOWMETERS**
Hot-wire liquid level detector for cryogenic
propellants
[NASA-CASE-XLE-00454] c23 N71-17802
- HOUSINGS**
Sealed housing for protecting electronic
equipment against electromagnetic interference
[NASA-CASE-MSC-12168-1] c09 N71-18600
Open type urine receptacle with tubular housing
[NASA-CASE-MSC-12324-1] c05 N72-22093
Readily assembled universal environment housing
for electronic equipment
[NASA-CASE-KSC-10031] c15 N72-22486
Gas flow control device, including housing and
input port
[NASA-CASE-NPO-11479] c15 N73-13462
Cryogenic gyroscope housing --- with annular
disks for gas spin-up
[NASA-CASE-MPS-21136-1] c35 N74-18323
Heat transfer device
[NASA-CASE-NPO-11120-1] c34 N74-18552
Deformable bearing seat
[NASA-CASE-LEW-12527-1] c37 N77-32500
- HOVERING**
Hovering type flying vehicle design and
principle mechanisms for manned or unmanned use
[NASA-CASE-MSC-12111-1] c02 N71-11039
- HUGENIOT EQUATION OF STATE**
Determining particle density using known
material Hugoniot curves
[NASA-CASE-LAR-11059-1] c76 N75-12810
- HULLS (STRUCTURES)**
Efficient operation of improved hydrofoil design
[NASA-CASE-XLA-00229] c12 N70-33305
- HUMAN BEINGS**
Method and apparatus for applying compressional
forces to skeletal structure of subject to
simulate force during ambulatory conditions
[NASA-CASE-ARC-10100-1] c05 N71-24738
Automatic braking device for rapidly
transferring humans or materials from elevated
location
[NASA-CASE-XKS-07814] c15 N71-27067
- HUMAN BODY**
Apparatus for measuring human body mass in zero
or reduced gravity environment
[NASA-CASE-XMS-03371] c05 N70-42000
Electromedical garment, applying
vectorcardiologic type electrodes to human
torsos for data recording during physical
activity
[NASA-CASE-IFR-10856] c05 N71-11189
Thermoregulating with cooling flow pipe network
for humans
[NASA-CASE-XMS-10269] c05 N71-24147
Tilting table for testing human body in variety
of positions while exercising on ergometer or
other biomedical devices
[NASA-CASE-MPS-21010-1] c05 N73-30078
Method and system for in vivo measurement of
bone tissue using a two level energy source
[NASA-CASE-MSC-14276-1] c52 N77-14737
- HUMAN FACTORS ENGINEERING**
Shock absorbing couch for body support under
high acceleration or deceleration forces
[NASA-CASE-XMS-01240] c05 N70-35152
Harness assembly adapted to support man on
ground based apparatus which simulates
weightlessness
[NASA-CASE-MPS-14671] c05 N71-12341

- Multiple circuit switch apparatus requiring minimum hand and eye movement by operator
[NASA-CASE-XAC-03777] c10 N71-15909
- Remote control device operated by movement of finger tips for manual control of spacecraft attitude
[NASA-CASE-XAC-02405] c09 N71-16089
- Design and development of flexible tunnel for use by spacecrews in performing extravehicular activities
[NASA-CASE-HSC-12243-1] c05 N71-24728
- Development of apparatus and method for quantitatively measuring brain activity as automatic indication of sleep state and level of consciousness
[NASA-CASE-HSC-13282-1] c05 N71-24729
- Spacesuit mobility joints
[NASA-CASE-ARC-11058-1] c54 N77-15641
- Spacesuit torso closure
[NASA-CASE-ARC-11100-1] c54 N77-25784
- Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-2] c52 N77-27694
- HUMAN PERFORMANCE**
Color perception tester for testing color code perceptiveness of individuals
[NASA-CASE-KSC-10278] c05 N72-16015
- HUMAN REACTIONS**
Reaction tester for testing reaction to light stimuli
[NASA-CASE-HSC-13604-1] c05 N73-13114
- HUMAN WASTES**
Reduced gravity fecal collector seat and urinal
[NASA-CASE-HFS-22102-1] c54 N74-20725
- Automatic biowaste sampling
[NASA-CASE-HSC-14640-1] c54 N76-14804
- HUMIDITY**
Passive intrusion detection system
[NASA-CASE-NFO-13804-1] c35 N77-19390
- HYBRID COMPUTERS**
Adaptive voting computer system
[NASA-CASE-HSC-13932-1] c62 N74-14920
- HYBRID PROPELLANTS**
Liner for hybrid solid propellants to bind propellant to rocket motor case
[NASA-CASE-XNP-09744] c27 N71-16392
- HYDRAULIC CONTROL**
Shear modulated fluid amplifier of high pressure hydraulic vortex amplifier type
[NASA-CASE-HFS-10412] c12 N71-17578
- Throttle valve for regulating fluid flow volume
[NASA-CASE-XNP-09698] c15 N71-18580
- Fluidic-thermochromic display device
[NASA-CASE-ERC-10031] c12 N71-18603
- Development and characteristics of variable displacement fluid pump for transforming hydraulic pressures
[NASA-CASE-HFS-20830] c15 N71-30028
- Hydraulic drain means for servo-systems
[NASA-CASE-NFO-10316-1] c37 N77-22479
- HYDRAULIC EQUIPMENT**
Hydraulic support equipment for full scale dynamic testing of large rocket vehicle under free flight conditions
[NASA-CASE-XNP-01772] c11 N70-41677
- Hydraulic support apparatus for dynamic testing of space vehicles under near-free flight conditions
[NASA-CASE-XNP-03248] c11 N71-10604
- Hydraulic drive mechanism for leveling isolation platforms
[NASA-CASE-XNS-03252] c15 N71-10658
- Antibacklash circuit for hydraulic drive system
[NASA-CASE-XNP-01020] c03 N71-12260
- Hydraulic clamping of sheet stock specimens
[NASA-CASE-XLA-05100] c15 N71-17696
- Design and development of double acting shock absorber for spacecraft docking operations
[NASA-CASE-XNS-03722] c15 N71-21530
- Hydraulic apparatus for casting and molding of liquid polymers
[NASA-CASE-XNP-07659] c06 N71-22975
- System to control speed of hydraulically movable members by limiting energy applied to actuators with hydraulic servo loop
[NASA-CASE-ARC-10131-1] c15 N71-27754
- Development of aircraft control system with high performance electrically controlled and mechanically operated hydraulic valves for precise flight operation
[NASA-CASE-XAC-00048] c02 N71-29128
- Development and characteristics of variable displacement fluid pump for transforming hydraulic pressures
[NASA-CASE-HFS-20830] c15 N71-30028
- Design and characteristics of mechanically extended and telescoping boom on crane assembly
[NASA-CASE-HFO-11118] c03 N72-25021
- Design and development of device to prevent geysering during convective circulation of cryogenic fluids
[NASA-CASE-KSC-10615] c15 N73-12486
- Redundant hydraulic control system for actuators with three main valve combination
[NASA-CASE-HFS-20944] c15 N73-13466
- Rocket propellant injector with porous faceplate for rocket engine combustion chamber
[NASA-CASE-LBW-11071-1] c27 N73-27695
- Servo valve
[NASA-CASE-LAR-11643-1] c37 N75-13268
- Combined pressure regulator and shutoff valve
[NASA-CASE-NFO-13201-1] c37 N75-15050
- Ultrasonically bonded valve assembly
[NASA-CASE-NFO-13360-1] c37 N75-25185
- Filter regeneration systems --- a system for regenerating a system filter in a fluid flow line
[NASA-CASE-HSC-14273-1] c34 N75-33342
- Quick disconnect filter coupling
[NASA-CASE-HFS-22323-1] c37 N76-14463
- Actuator device for artificial leg
[NASA-CASE-HFS-23225-1] c52 N77-14735
- HYDRAULIC FLUIDS**
Miniature hydraulic actuator --- for control surfaces on airfoils
[NASA-CASE-LAR-11522-1] c34 N74-34881
- Safety flywheel
[NASA-CASE-HCN-10888-1] c37 N77-22484
- HYDRAZINE NITROFORM**
Solid propellant containing hydrazinium nitroformate oxidizer and polymeric hydrocarbon binder
[NASA-CASE-NFO-12015] c27 N73-16764
- HYDRAZINES**
Catalyst bed ignition system for hydrazine propellants
[NASA-CASE-XNP-00876] c28 N70-41311
- Hydrazine monoperfluoro alkanoate solder flux leaving corrosion resistant coating, for metals such as copper
[NASA-CASE-XNP-03459-2] c18 N71-15688
- Rubber composition for expulsion bladders and diaphragms for use with hydrazine
[NASA-CASE-NFO-11433] c18 N71-31140
- Prevention of hydrogen embrittlement of high strength steel by hydrazine compositions --- by adding potassium hydroxide to hydrazine
[NASA-CASE-NFO-12122-1] c24 N76-14203
- HYDROCARBON FUELS**
Apparatus for producing hydrocarbon slurry containing small particles of magnesium for use as jet aircraft fuel
[NASA-CASE-XLB-00010] c15 N70-33382
- Hydrogen rich gas generator
[NASA-CASE-NFO-13342-2] c44 N76-29700
- Hydrogen rich gas generator
[NASA-CASE-NFO-13464-2] c44 N76-29704
- HYDROCARBONS**
Solid propellant containing hydrazinium nitroformate oxidizer and polymeric hydrocarbon binder
[NASA-CASE-NFO-12015] c27 N73-16764
- Hydrogen rich gas generator
[NASA-CASE-NFO-13342-1] c37 N76-16446
- Pyrolysis system and process --- recovering energy from solid wastes containing hydrocarbons
[NASA-CASE-HSC-12669-1] c44 N76-16621
- In-situ laser retorting of oil shale
[NASA-CASE-LBW-12217-1] c36 N77-18429
- Combustion engine --- for air pollution control
[NASA-CASE-NFO-13671-1] c37 N77-31497
- HYDROCHLORIC ACID**
Indicator providing continuous indication of the presence of a specific pollutant in air
[NASA-CASE-NFO-13474-1] c45 N76-21742
- HYDROFOILS**
Efficient operation of improved hydrofoil design
[NASA-CASE-XLA-00229] c12 N70-33303

HYDECFORMING

Cold metal hydroforming techniques using epoxy molds for counteracting creep or stretch
[NASA-CASE-XLF-05641-1] c15 N71-26346

HYDROGEN

Method and transducer device for detecting presence of hydrogen gas
[NASA-CASE-XMF-03873] c06 N69-39733

Preventing pressure buildup in electrochemical cells by reacting palladium oxide with evolved hydrogen
[NASA-CASE-XGS-01419] c03 N70-41864

Development of pulse-activated polarographic hydrogen detector
[NASA-CASE-XMF-06531] c14 N71-17575

Development of device for detecting hydrogen in ambient environments
[NASA-CASE-MFS-11537] c14 N71-20442

Gas chromatographic method for analyzing hydrogen deuterium mixtures
[NASA-CASE-NPO-11322] c06 N72-25146

Hydrogen fire blink detector for high altitude rocket or ground installation
[NASA-CASE-MFS-15063] c14 N72-25412

Separation of dissolved hydrogen from water and coating with palladium black
[NASA-CASE-MSC-13335-1] c06 N72-31140

Atomic hydrogen maser with bulb temperature control by output frequency difference signal for wall shift elimination
[NASA-CASE-BQN-10654-1] c16 N73-13489

Method of producing a storage bulb for an atomic hydrogen maser
[NASA-CASE-NFO-13050-1] c36 N75-15029

Atomic standard with variable storage volume
[NASA-CASE-GSC-11895-1] c35 N76-15436

Hydrogen rich gas generator
[NASA-CASE-NFO-13342-1] c37 N76-16446

Hydrogen-bromine secondary battery
[NASA-CASE-NFO-13237-1] c44 N76-18641

Hydrogen-rich gas generator
[NASA-CASE-NFO-13464-1] c44 N76-18642

Solar hydrogen generator
[NASA-CASE-LAR-11361-1] c44 N77-22607

Solar photolysis of water
[NASA-CASE-NPO-13675-1] c44 N77-32580

HYDROGEN EMBRITTLEMENT

Prevention of hydrogen embrittlement of high strength steel by hydrazine compositions --- by adding potassium hydroxide to hydrazine
[NASA-CASE-NFO-12122-1] c24 N76-14203

HYDROGEN FUELS

Atomic hydrogen storage method and apparatus --- in strong magnetic fields
[NASA-CASE-LFW-12081-1] c28 N76-22399

Hydrogen rich gas generator
[NASA-CASE-NFO-13342-2] c44 N76-29700

Hydrogen rich gas generator
[NASA-CASE-NFO-13464-2] c44 N76-29704

Hydrogen-rich gas generator
[NASA-CASE-NFO-13560-1] c44 N77-10636

HYDROGEN OXYGEN ENGINES

Hydrogen-fueled engine
[NASA-CASE-NFO-13763-1] c37 N77-11398

HYDROGEN OXYGEN FUEL CELLS

Electrolytically regenerative hydrogen-oxygen fuel cells
[NASA-CASE-XLF-04526] c03 N71-11052

Water electrolysis rocket engine with self-regulating stoichiometric fuel mixing regulator
[NASA-CASE-XGS-08729] c28 N71-14044

HYDROGEN PEROXIDE

Unit for generating thrust from catalytic decomposition of hydrogen peroxide, for high altitude aircraft or spacecraft reaction control
[NASA-CASE-XMS-00583] c28 N70-38504

HYDROGENATION

Producing high purity silicon carbide on carbon base by hydrogen reduction of silicon tetrachloride
[NASA-CASE-XLA-00158] c26 N70-36805

Compact hydrogenator
[NASA-CASE-NFO-11682-1] c35 N74-15127

HYDROSTATICS

Hydrostatic bearing support
[NASA-CASE-LFW-11158-1] c37 N77-28486

HYDROXIDES

Method for determining presence and type of OH in HgO

[NASA-CASE-NFO-10774]

c06 N72-17095

HYGROMETERS

Polymetric electrolytic hygrometer
[NASA-CASE-NFO-13948-1] c35 N77-28470

HYGROSCOPICITY

Method of evaluating moisture barrier properties of materials used in electronics encapsulation
[NASA-CASE-NFO-10051] c18 N71-24934

HYPERFINE STRUCTURE

Process for producing dispersion strengthened nickel with aluminum comprising metallic matrices embedded with oxides or other hyperfine compounds
[NASA-CASE-XLE-06969] c17 N71-24142

HYPERGOLIC ROCKET PROPELLANTS

Solid propellant ignition with hypergolic fluid injected to predetermined portions of propellant
[NASA-CASE-XLE-00207] c28 N70-33375

Regenerative cooling system for small rocket engine having restart capability and using noncryogenic hypergolic propellants
[NASA-CASE-XLE-00685] c28 N70-41992

Method for igniting solid propellant rocket motors by injecting hypergolic fluids
[NASA-CASE-XLE-01988] c27 N71-15634

HYPERSONIC AIRCRAFT

Multistage aerospace craft --- perspective drawings of conceptual design
[NASA-CASE-XMF-02263] c05 N74-10907

HYPERSONIC FLOW

Design of hypersonic test facility for ablation tests and performance tests of vehicles under conditions of high temperature and pressure
[NASA-CASE-XLA-05378] c11 N71-21475

HYPERSONIC SPEED

Leading edge design for hypersonic reentry vehicles
[NASA-CASE-XLA-00165] c31 N70-33242

Aerospace vehicle with variable planform for hypersonic and subsonic flight
[NASA-CASE-XLA-00805] c31 N70-38010

Variable geometry manned orbital vehicle having high aerodynamic efficiency over wide speed range and incorporating auxiliary pivotal wings
[NASA-CASE-XLA-03691] c31 N71-15674

Supersonic or hypersonic vehicle control system comprising elevons with hinge line sweep and free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088

Generation of high temperature, high mass flow, and high Reynolds number air at hypersonic speeds
[NASA-CASE-LAR-10578-1] c12 N73-25262

Apparatus and method for generating large mass flow of high temperature air at hypersonic speeds
[NASA-CASE-LAR-10612-1] c12 N73-28144

HYPERSONIC VEHICLES

Carbon dioxide purge systems to prevent condensation in spaces between cryogenic fuel tanks and hypersonic vehicle skin
[NASA-CASE-XLA-01967] c31 N70-42015

HYPERVELOCITY GUNS

Method and apparatus for use in forming highly collimated beam of microparticles with high charge to mass ratio and injecting beam into electrostatic accelerating tube
[NASA-CASE-XGS-06628] c24 N71-16213

Implosion driven, light gas, hypervelocity gun
[NASA-CASE-XAC-05902] c11 N71-18578

Collapsible piston for hypervelocity gun
[NASA-CASE-MSC-13789-1] c11 N73-32152

HYPERVELOCITY IMPACT

Method of and device for determining the characteristics and flux distribution of micrometeorites --- scanning puncture holes in sheet material with photoelectric cell
[NASA-CASE-NFO-12127-1] c91 N74-13130

Semiconductor projectile impact detector
[NASA-CASE-MFS-23008-1] c35 N76-19405

HYPERVELOCITY PROJECTILES

Impact measuring technique for determining size of hypervelocity projectiles
[NASA-CASE-LAR-10913] c14 N72-16282

Multiple image storing system for obtaining holographic record on film of high speed projectile
[NASA-CASE-MFS-20596] c14 N72-17324

HYPERVELOCITY WIND TUNNELS

- Hypersonic test facility for studying ablation in models under high pressure and high temperature
[NASA-CASE-XIA-00378] c11 N71-15925
- Design of hypersonic test facility for ablation tests and performance tests of vehicles under conditions of high temperature and pressure
[NASA-CASE-XIA-05378] c11 N71-21475

HYSTERESIS

- Belleville spring assembly with elastic guides having low hysteresis
[NASA-CASE-XNP-09452] c15 N69-27504

IGNITERS

- Characteristics of solid propellant rocket engine with controlled rate of thrust buildup operating in vacuum environment
[NASA-CASE-NPO-11559] c28 N73-24784
- Remote fire stack igniter --- with solenoid-controlled valve
[NASA-CASE-NFS-21675-1] c25 N74-33378
- Molded composite pyrogen igniter for rocket motors
[NASA-CASE-LAR-12018-1] c20 N76-29365

IGNITION

- Magnetically controlled plasma accelerator capable of ignition in low density gaseous environment
[NASA-CASE-XIA-00327] c25 N71-29184

IGNITION LIMITS

- High voltage pulse generator for testing flash and ignition limits of nonmetallic materials in controlled atmospheres
[NASA-CASE-MSC-12178-1] c09 N71-13518

IGNITION SYSTEMS

- Solid propellant ignition with hypergolic fluid injected to predetermined portions of propellant
[NASA-CASE-XIE-00207] c28 N70-33375
- Ignition system for monopropellant combustion devices
[NASA-CASE-XNP-00249] c28 N70-38249
- Igniter capsule for chemical ignition of liquid rocket propellants
[NASA-CASE-XIE-00323] c28 N70-38505
- Catalyst bed ignition system for hydrazine propellants
[NASA-CASE-XNP-00876] c28 N70-41311
- Sustained arc ignition system
[NASA-CASE-LEW-12444-1] c33 N77-28385

IGNITION TEMPERATURE

- Test chamber for determining decomposition and autoignition of materials used in spacecraft under controlled environmental conditions
[NASA-CASE-KSC-10198] c11 N71-28629

ILLUMINATING

- Illumination control apparatus for compensating solar light
[NASA-CASE-KSC-11010-1] c44 N77-15493

ILLUMINATORS

- Camera adapter design for image magnification including lens and illuminator
[NASA-CASE-XNP-03844-1] c14 N71-26474
- Illumination system design for use as sunlight simulator in space environment simulators with multiple light sources reflected to single virtual source
[NASA-CASE-BQN-10781] c23 N71-30292

IMAGE CONTRAST

- Video signal enhancement of signal component representing brightness of scene element in low contrast
[NASA-CASE-NPO-10343] c07 N71-27341
- Method and apparatus for producing an image from a transparent object
[NASA-CASE-GSC-11989-1] c74 N77-28932

IMAGE CONVERTERS

- Real time liquid crystal image converter
[NASA-CASE-LAR-11206-1] c74 N74-30118
- Deep trap, laser activated image converting system
[NASA-CASE-NPO-13131-1] c36 N75-19652
- Resistive anode image converter
[NASA-CASE-BQN-10876-1] c33 N76-27473

IMAGE CORRELATORS

- Multiple pattern holographic information storage and readout system
[NASA-CASE-ERC-10151] c16 N71-29131

- Automatic focus control for facsimile cameras
[NASA-CASE-LAR-11213-1] c35 N75-15014

IMAGE DISSECTOR TUBES

- Apparatus for calibrating an image dissector tube
[NASA-CASE-NFS-22208-1] c33 N75-26244
- Electronic optical transfer function analyzer
[NASA-CASE-NFS-21672-1] c74 N76-19935

IMAGE ENHANCEMENT

- Electron beam scanning system for improved image definition and reduced power requirements for video signal transmission
[NASA-CASE-ERC-10552] c09 N71-12539
- Physical correction filter for improving the optical quality of an image
[NASA-CASE-BQN-10542-1] c74 N75-25706
- Method of post-process intensification of images on photographic films and plates
[NASA-CASE-NFS-23461-1] c35 N76-26449
- A miniature implantable ultrasonic echosonometer
[NASA-CASE-ABC-11035-1] c52 N77-15621

IMAGE FILTERS

- Filter arrangement for controlling light intensity in motion picture camera used in optical pyrometry
[NASA-CASE-XIA-00062] c14 N70-33254
- Physical correction filter for improving the optical quality of an image
[NASA-CASE-BQN-10542-1] c74 N75-25706

IMAGE INTENSIFIERS

- Magnifying image intensifier
[NASA-CASE-GSC-12010-1] c33 N76-23482
- Low intensity X-ray and gamma-ray imaging device
[NASA-CASE-GSC-12263-1] c35 N77-29471

IMAGE TUBES

- Image tube --- deriving electron beam replica of image
[NASA-CASE-GSC-11602-1] c33 N74-21850
- System for producing chroma signals
[NASA-CASE-MSC-14683-1] c74 N77-18893

IMAGERY

- Surface roughness measuring system
[NASA-CASE-NPO-13862-1] c32 N77-17325

IMAGES

- Camera adapter design for image magnification including lens and illuminator
[NASA-CASE-XNP-03844-1] c14 N71-26474
- Stereoscopic television system, including projecting pair of binocular images
[NASA-CASE-ABC-10160-1] c23 N72-27728

IMAGING TECHNIQUES

- Highly stable optical mirror assembly optimizing image quality of light diffraction patterns
[NASA-CASE-ERC-10001] c23 N71-24868
- Noise elimination in coherent imaging system by axial rotation of optical lens for spectral distribution of degrading affects
[NASA-CASE-GSC-11133-1] c23 N72-11568
- Phototransistor imaging system with mosaic of phototransistors on semiconductor substrate
[NASA-CASE-NFS-20809] c23 N73-13660
- Computerized optical system for producing multiple images of a scene simultaneously
[NASA-CASE-MSC-12404-1] c23 N73-13661
- Optical imaging system for increasing light absorption efficiency of imaging detector
[NASA-CASE-ARC-10194-1] c23 N73-20741
- Device for displaying and recording angled views of samples to be viewed by microscope
[NASA-CASE-GSC-11690-1] c14 N73-28499
- Ritchey-Chretien telescope responsive to images located off telescope optical axis
[NASA-CASE-GSC-11487-1] c14 N73-30393
- Data storage, image tube type
[NASA-CASE-MSC-14053-1] c60 N74-12888
- Optical instruments
[NASA-CASE-MSC-14096-1] c74 N74-15095
- Field sequential stereo television
[NASA-CASE-MSC-12616-1] c32 N74-32601
- Electron microscope aperture system
[NASA-CASE-ARC-10448-3] c35 N77-14408
- Method and apparatus for producing an image from a transparent object
[NASA-CASE-GSC-11989-1] c74 N77-28932
- Low intensity X-ray and gamma-ray imaging device
[NASA-CASE-GSC-12263-1] c35 N77-29471

INIDS

- Synthesis and chemical properties of imidazopyrrolone/imide copolymers
[NASA-CASE-XIA-08802] c06 N71-11238

- Molding process for imidazopyrrolone polymers
[NASA-CASE-LAR-10547-1] c31 N74-13177
- IMINES**
Synthesis of polymeric schiff bases by schiff-base exchange reactions
[NASA-CASE-XMP-08651] c06 N71-11236
Direct synthesis of polymeric schiff bases from two amines and two aldehydes
[NASA-CASE-XMP-08655] c06 N71-11239
Synthesis of schiff bases for heat shields by acetal arine reactions
[NASA-CASE-XMP-08652] c06 N71-11243
Synthesis of aromatic diamines and dialdehyde polymers using Schiff base
[NASA-CASE-XMP-03074] c06 N71-24740
- IMMOBILIZATION**
Stretcher with rigid head and neck support with capability of supporting immobilized person in vertical position for removal from vehicle hatch to exterior also useful as splint stretcher
[NASA-CASE-XMP-06589] c05 N71-23159
Absolute focus locking device for microscopes to maintain set focus for extended time period
[NASA-CASE-LAR-10184] c14 N72-22445
- IMPACT**
Shock absorber for use as protective barrier in impact energy absorbing system
[NASA-CASE-NPO-10671] c15 N72-20443
System for detecting impact position of cosmic dust on detector surface
[NASA-CASE-GSC-11291-1] c25 N72-33696
Impact position detector for outer space particles
[NASA-CASE-GSC-11829-1] c35 N75-27331
- IMPACT ACCELERATION**
Suspended mass oscillation damper based on impact energy absorption for damping wind induced oscillations of tall stacks, antennas, and umbilical towers
[NASA-CASE-LPR-10193-1] c15 N71-27146
- IMPACT DAMAGE**
Measuring micrometeoroid depth of penetration into various materials
[NASA-CASE-XLA-00941] c14 N71-23240
- IMPACT LOADS**
Piezoelectric transducer for detecting and measuring micrometeoroids
[NASA-CASE-XAC-01101] c14 N70-41957
Impact testing machine for imparting large impact forces on high velocity packages
[NASA-CASE-INP-04817] c14 N71-23225
- IMPACT RESISTANCE**
Electric storage battery with high impact resistance
[NASA-CASE-NPO-11021] c03 N72-20032
Hybrid composite laminate structures
[NASA-CASE-LEW-12118-1] c24 N77-27188
- IMPACT STRENGTH**
High impact pressure regulator having minimum number of lightweight movable elements
[NASA-CASE-NPO-10175] c14 N71-18625
- IMPACT TESTING MACHINES**
Development and characteristics of pentrometer for measuring physical properties of lunar surface
[NASA-CASE-XLA-00934] c14 N71-22765
Impact testing machine for imparting large impact forces on high velocity packages
[NASA-CASE-XMP-04817] c14 N71-23225
- IMPACT TOLERANCES**
High impact antennas with high radiating efficiency
[NASA-CASE-NPO-10231] c07 N71-26101
- IMPEDANCE MATCHING**
Impedance transformation device for signal mixing
[NASA-CASE-XGS-01110] c07 N69-24334
Reflectometer for receiver input impedance match measurement
[NASA-CASE-INP-10843] c07 N71-11267
Radio frequency coaxial filter to provide dc isolation and low frequency signal rejection in audio range
[NASA-CASE-XGS-01418] c09 N71-23573
Pattern and impedance matching improvements in transversely polarized triaxial antenna
[NASA-CASE-XGS-02290] c07 N71-28809
- IMPEDANCE MEASUREMENTS**
Development of electrical system for measuring high impedance.
- [NASA-CASE-XMS-08589-1] c09 N71-20569
- IMPLANTATION**
Biotelemetry apparatus with dual voltage generators for implanting in animals
[NASA-CASE-XAC-05706] c05 N71-12342
Magnetic electrical connectors for biomedical percutaneous implants
[NASA-CASE-KSC-11030-1] c52 N77-25772
- IMPLOSIONS**
Implosion driven, light gas, hypervelocity gun
[NASA-CASE-XAC-05902] c11 N71-18578
- IMPROVEMENT**
Improved solar heating system
[NASA-CASE-LAR-12009-1] c44 N76-32649
- IMPULSE GENERATORS**
Percutaneous connector device
[NASA-CASE-KSC-10849-1] c52 N77-14738
- IMPURITIES**
Fabrication of sintered impurity semiconductor brushes for electrical energy transfer
[NASA-CASE-XMP-01016] c26 N71-17818
- INCIDENT RADIATION**
Frequency scanning particle size spectrometer
[NASA-CASE-NPO-13606-1] c35 N75-19627
Solar cell assembly --- for use under high intensity illumination
[NASA-CASE-LEW-11549-1] c44 N77-19571
- INCLINATION**
Hingeless helicopter rotor with improved stability
[NASA-CASE-ARC-10807-1] c05 N77-17029
- INCOHERENT SCATTERING**
Rapidly pulsed, high intensity, incoherent light source
[NASA-CASE-XLE-2529-3] c33 N74-20859
- INDICATING INSTRUMENTS**
Piezoelectric means for missile stage separation indication and stage initiation
[NASA-CASE-XLA-00791] c03 N70-39930
Inductive liquid level detection system
[NASA-CASE-XLE-01609] c14 N71-10500
Apparatus for determining quality of bond between high density material and low density material
[NASA-CASE-MPS-13686] c15 N71-18132
Device for detecting hydrogen fires onboard high altitude rockets
[NASA-CASE-MPS-13130] c10 N72-17173
- INDIUM ALLOYS**
Solar cell collector and method for producing same --- indium alloy coatings
[NASA-CASE-LEW-12552-1] c44 N77-17564
Method for attaching a fused-quartz mirror to a conductive metal substrate
[NASA-CASE-MPS-23405-1] c26 N77-29260
- INDUCTANCE**
Current dependent variable inductance for input filter chokes of ac or dc power supplies
[NASA-CASE-ERC-10139] c09 N72-17154
Inductance device with vacuum insulation and materials of low gas entrapping capability
[NASA-CASE-LEW-10330-1] c09 N72-27226
Direct reading inductance meter
[NASA-CASE-NPO-13792-1] c35 N77-32455
- INDUCTION HEATING**
Induction heating of metallurgical specimens to high temperatures in coil furnace
[NASA-CASE-XLE-04026] c14 N71-23267
- INDUCTION MOTORS**
Voltage controlled oscillator circuit for two-phase induction motor control
[NASA-CASE-MPS-21465-1] c10 N73-32145
Variable frequency inverter for ac induction motors with torque, speed and braking control
[NASA-CASE-MPS-22088-1] c33 N75-15874
Power factor control system for ac induction motors
[NASA-CASE-MPS-23280-1] c33 N76-28471
- INDUCTORS**
Inductive liquid level detection system
[NASA-CASE-XLE-01609] c14 N71-10500
Describing apparatus used in vacuum deposition of thin film inductive windings for spacecraft microcircuitry
[NASA-CASE-INP-01667] c15 N71-17647
Double-induction variable speed system for constant-frequency electrical power generation
[NASA-CASE-ERC-10065] c09 N71-27364
- INDUSTRIAL PLANTS**
Simplified technique and device for producing

SUBJECT INDEX

INITIATORS (EXPLOSIVES)

- industrial grade synthetic diamonds
[NASA-CASE-MFS-20698-2] c15 N73-19457
- INDUSTRIAL WASTES**
Process for purification of waste water produced by a Kraft process pulp and paper mill
[NASA-CASE-NFO-13847-2] c85 N77-17949
- INERTIA**
Gearing system for eliminating backlash and filtering input torque fluctuations from high inertia load
[NASA-CASE-XGS-04227] c15 N71-21744
- INERTIAL GUIDANCE**
Hermetically sealed vibration damper design for use in gimbal assembly of spacecraft inertial guidance system
[NASA-CASE-MSC-10959] c15 N71-26243
- INERTIAL PLATFORMS**
Inertial component clamping assembly design for spacecraft guidance and control system mounting
[NASA-CASE-XMS-02184] c15 N71-20813
Inertial gimbal alignment system for spacecraft guidance
[NASA-CASE-XMF-01669] c21 N71-23289
Temperature compensated digital inertial sensor --- circuit for maintaining inertial element of gyroscope or accelerometer at constant position
[NASA-CASE-NFO-13044-1] c35 N74-15094
Attitude control system
[NASA-CASE-MFS-22787-1] c15 N77-10113
- INERTIAL REFERENCE SYSTEMS**
Development of attitude control system for spacecraft orientation
[NASA-CASE-XGS-04393] c21 N71-14159
Large amplitude, linear inertial reference system of vibrating string type for spacecraft reference plane
[NASA-CASE-XAC-03107] c23 N71-16098
- INFECTIOUS DISEASES**
Detection of microbial infection in blood and antibiotic determinations
[NASA-CASE-GSC-12045-1] c52 N77-18733
- INFLATABLE SPACECRAFT**
Passive thermal control coating on aluminum foil laminate for inflatable spacecraft surfaces
[NASA-CASE-XLA-01291] c33 N70-36617
Erectable, inflatable, radio signal reflecting passive communication satellite
[NASA-CASE-XLA-00210] c30 N70-40309
Rotating, multisided mandrel for fabricating gored inflatable spacecraft
[NASA-CASE-XLA-04143] c15 N71-17687
Forming inflatable panels erectable in space for passive communication satellite
[NASA-CASE-XLA-03497] c15 N71-23052
Development and characteristics of inflatable structure to provide escape from orbit for spacecrews under emergency conditions
[NASA-CASE-XMS-06162] c31 N71-28851
- INFLATABLE STRUCTURES**
Aeroflexible wing structure with air scoop for inflating stiffeners with ram air
[NASA-CASE-XLA-06095] c01 N69-39981
Lightweight life preserver without fastening devices
[NASA-CASE-XMS-00864] c05 N70-36493
Inflatable honeycomb panel element for lightweight structures usable in space stations and other construction
[NASA-CASE-XLA-00204] c32 N70-36536
Inflatable radar reflector unit - lightweight, highly reflective to electromagnetic radiation, and adaptable for erection and deployment with minimum effort and time
[NASA-CASE-XMS-00893] c07 N70-40063
Temperature sensor warning system for pneumatic tires of aircraft and ground vehicles
[NASA-CASE-XLA-01926] c14 N71-15620
Inflation system for balloon type satellites
[NASA-CASE-XGS-03351] c31 N71-16081
Development and characteristics of protective coatings for spacecraft
[NASA-CASE-XMP-02507] c31 N71-17679
Development and characteristics of self supporting space vehicle
[NASA-CASE-XLA-00117] c31 N71-17680
Conforming polisher for aspheric surfaces of revolution with inflatable tube
[NASA-CASE-XGS-02884] c15 N71-22705
- Technique for making foldable, inflatable, plastic honeycomb core panels for use in building and bridge structures, light and radio wave reflectors, and spacecraft
[NASA-CASE-XLA-03492] c15 N71-22713
Collapsible antenna boom and coaxial transmission line having inflatable inner tube
[NASA-CASE-MFS-20068] c07 N71-27191
Space expandable tether device for use as passageway between two docked spacecraft
[NASA-CASE-XMS-10993] c15 N71-28936
Inflatable rocket engine nozzle skirt with transpiration cooling
[NASA-CASE-MFS-20619] c28 N72-11708
Modification of one man life raft
[NASA-CASE-LAB-10241-1] c54 N74-14845
- INFORMATION RETRIEVAL**
Multiple pattern holographic information storage and readout system
[NASA-CASE-EBC-10151] c16 N71-29131
- INFRARED DETECTORS**
Temperature sensitive capacitor device for detecting very low intensity infrared radiation
[NASA-CASE-XMP-09750] c14 N69-39937
Sight switch using infrared source and sensor mounted beside eye
[NASA-CASE-XMP-03934] c09 N71-22985
Characteristics of infrared photodetectors manufactured from semiconductor material irradiated by electron beam
[NASA-CASE-LAB-10728-1] c14 N73-12445
Doped Josephson tunneling junction for use in a sensitive IR detector
[NASA-CASE-NFO-13348-1] c33 N75-31332
- INFRARED INSTRUMENTS**
Infrared scanning system for maintaining spacecraft orientation with earth reference
[NASA-CASE-XLA-00120] c21 N70-33181
- INFRARED LASERS**
Monitoring atmospheric pollutants with a heterodyne radiometer transmitter-receiver
[NASA-CASE-NFO-11919-1] c35 N74-11284
Gregorian all-reflective optical system
[NASA-CASE-GSC-12058-1] c74 N77-26942
- INFRARED RADIATION**
High speed infrared furnace
[NASA-CASE-XLR-10466] c17 N69-25147
High field CdS detector for infrared radiation
[NASA-CASE-LAR-11027-1] c35 N74-18088
- INFRARED SCANNERS**
Infrared scanning system for maintaining spacecraft orientation with earth reference
[NASA-CASE-XLA-00120] c21 N70-33181
Method and equipment for locating earth infrared horizon from space, independent of season and latitude
[NASA-CASE-LAR-10726-1] c14 N73-20475
- INFRARED SPECTRA**
Diatomic infrared gasdynamic laser --- for producing different wavelengths
[NASA-CASE-ARC-10370-1] c36 N75-31426
- INFRARED SPECTROMETERS**
Telespectrograph for analyzing upper atmosphere by tracking bodies reentering atmosphere at high velocities
[NASA-CASE-XLA-03273] c14 N71-18699
- INFRARED SPECTROSCOPY**
Polymer coatings for moisture protection of optical windows in infrared spectroscopy
[NASA-CASE-ARC-10749-1] c23 N73-32542
Method and apparatus for providing a servo drive signal in a high-speed stepping interferometer
[NASA-CASE-NFO-13569-2] c33 N77-28395
- INFRASONIC FREQUENCIES**
Resonant infrasonic gauging device for measuring liquid quantity in closed bladderless reservoir
[NASA-CASE-MSC-11847-1] c14 N72-11363
- INITIATORS (EXPLOSIVES)**
Piezoelectric means for missile stage separation indication and stage initiation
[NASA-CASE-XLA-00791] c03 N70-39930
Electroexplosive safe-arm initiator using electric driven electromagnetic coils and magnets to align charge
[NASA-CASE-LAR-10372] c09 N71-18599

INJECTION

SUBJECT INDEX

Electroexplosive device
[NASA-CASE-NPO-13858-1] c28 N77-17258

INJECTION
Foam insulation thickness measuring and
injection device for spacecraft applications
[NASA-CASE-MFS-20261] c14 N71-27005

INJECTORS
Propellant injectors for rocket combustion
chambers
[NASA-CASE-XLF-00103] c28 N70-33241
Fuel injection system for maximum combustion
efficiency of rocket engines
[NASA-CASE-XLE-00111] c28 N70-38199
Injector manifold assembly for bipropellant
rocket engines providing for fuel propellant
to serve as coolant
[NASA-CASE-XMF-00148] c28 N70-38710
Method and apparatus for use in forming highly
collimated beam of microparticles with high
charge to mass ratio and injecting beam into
electrostatic accelerating tube
[NASA-CASE-XGS-06628] c24 N71-16213
Control valve and coaxial variable injector for
controlling bipropellant mixture ratio and flow
[NASA-CASE-XNP-09702] c15 N71-17654
Rocket engine injector orifice to accommodate
changes in density, velocity, and pressure,
thereby maintaining constant mass flow rate of
propellant into rocket combustion chamber
[NASA-CASE-XLE-03157] c28 N71-24736
Bipropellant injector with pair of concave
deflector plates
[NASA-CASE-XNP-09461] c28 N72-23809
Coaxial injector for mixing liquid propellants
within combustion chambers
[NASA-CASE-NPO-11095] c15 N72-25455
Improved injector with porous plug for bubbles
of gas into feed lines of electrically
conductive liquid
[NASA-CASE-NPO-11377] c15 N73-27406
Splash groove fuel injector
[NASA-CASE-LEW-12417-1] c07 N76-22198

INLET FLOW
High pressure four-way valve with O ring adapted
to pass across inlet port
[NASA-CASE-XNP-00214] c15 N70-36908
Method for maintaining good performance in gas
turbine during air flow distortion
[NASA-CASE-LEW-10286-1] c28 N71-28915
Airflow control system for supersonic inlets
[NASA-CASE-LEW-11188-1] c02 N74-20646
Variably positioned guide vanes for aerodynamic
choking
[NASA-CASE-LAR-10642-1] c07 N74-31270
Shock position sensor for supersonic inlets ---
measuring pressure in the throat of a
supersonic inlet
[NASA-CASE-LEW-11915-1] c35 N76-14431
Method for fabricating a mass spectrometer inlet
leak
[NASA-CASE-GSC-12077-1] c35 N77-24455

INLET PRESSURE
Fluid jet amplifier with fluid from jet nozzle
deflected by inlet pressure
[NASA-CASE-XLE-03512] c12 N69-21466
Shock position sensor for supersonic inlets ---
measuring pressure in the throat of a
supersonic inlet
[NASA-CASE-LEW-11915-1] c35 N76-14431

INOCULATION
Automatic inoculating apparatus --- includes
movable carriage, drive motor, and swabbing
motor
[NASA-CASE-LAR-11074-1] c51 N75-13502

INORGANIC COATINGS
Composition of diffuse reflective coating
containing sodium chloride in combination with
diol solvent and organic wetting and drying
agents
[NASA-CASE-GSC-11214-1] c06 N73-13128
Inorganic-organic battery separator for alkaline
batteries
[NASA-CASE-LEW-12649-1] c44 N76-31674
Boron trifluoride coatings for thermoplastic
materials
[NASA-CASE-ARC-11057-1] c27 N77-26308

INORGANIC COMPOUNDS
Inorganic ion exchange membrane electrolytes for
fuel cell use

[NASA-CASE-XNP-04264] c03 N69-21337
Preparation of inorganic solid film lubricants
with long wear life and stability in aerospace
environments
[NASA-CASE-XNP-03988] c15 N71-21403
Modification of polyurethanes with alkyl halide
resins, inorganic salts, and encapsulated
volatile and reactive halogen for fuel fire
control
[NASA-CASE-ARC-10098-1] c06 N71-24739
Inorganic thermal control and solar reflector
coatings
[NASA-CASE-MFS-20011] c18 N72-22566
Process for preparing higher oxides of the
alkali and alkaline earth metals --- using
radio frequency discharge sustained in oxygen
[NASA-CASE-ARC-10992-1] c25 N77-17178

INORGANIC PEROXIDES
Process for the preparation of calcium superoxide
[NASA-CASE-ARC-11053-1] c25 N77-29252

INPUT
Apparatus for filtering input signals
[NASA-CASE-NPO-10198] c09 N71-24806
RC networks with voltage amplifier, RC input
circuit, and positive feedback
[NASA-CASE-ARC-10020] c10 N72-17172

INPUT/OUTPUT ROUTINES
Analog to digital converter
[NASA-CASE-NPO-13385-1] c33 N76-18345

INSERTION LOSS
High impedance alternating current sensing
transformer device between two bolometers for
measuring insertion loss of test component
[NASA-CASE-XNP-01193] c10 N71-16057

INSTALLING
Device for installing rocket engines
[NASA-CASE-MFS-19220-1] c20 N76-22296
Thermocouple installation
[NASA-CASE-NPO-13540-1] c35 N77-14409

INSTRUMENT ERRORS
Solar radiation direction detector and device
for compensating degradation of photocells
[NASA-CASE-XLA-00183] c14 N70-40239

INSTRUMENT FLIGHT RULES
Controlled visibility device for simulating poor
visibility conditions in training pilots in
instrument landing and flight procedures
[NASA-CASE-XPR-04147] c11 N71-10748

INSTRUMENT ORIENTATION
Sensor consisting of photocells mounted on
pyramidal base for improved pointing
accuracy of planetary trackers
[NASA-CASE-XNP-04180] c07 N69-39736
Inertial gimbal alignment system for spacecraft
guidance
[NASA-CASE-XNP-01669] c21 N71-23289
Optical gauging system for monitoring machine
tool alignment
[NASA-CASE-XAC-09489-1] c15 N71-26673
Development of solar energy powered heliotrope
assembly to orient solar array toward sun
[NASA-CASE-GSC-10945-1] c21 N72-31637

INSTRUMENT PACKAGES
Apparatus for ejecting covers of instrument
packages using differential pressure principle
[NASA-CASE-XNP-04132] c15 N69-27502
Removable potting compound for instrument shock
protection
[NASA-CASE-XLA-00482] c15 N70-36409
Plastic foam generator for space vehicle
instrument payload package flotation in water
landing
[NASA-CASE-XLA-00838] c03 N70-36778
High velocity guidance and spin stabilization
gyro controlled jet reaction system for launch
vehicle payloads
[NASA-CASE-XLA-01339] c31 N71-15692
Ethylene oxide sterilization and encapsulating
process for sterile preservation of
instruments and solid propellants
[NASA-CASE-XNP-09763] c14 N71-20461

INSTRUMENTS
Method and apparatus for bowing of instrument
panels to improve radio frequency shielded
enclosure
[NASA-CASE-XNP-09422] c07 N71-19436
Design and development of pressure sensor for
measuring differential pressures of few pounds
per square inch

SUBJECT INDEX

INTERNAL COMBUSTION ENGINES

- [NASA-CASE-IXF-01974] c14 N71-22752
Development of temperature compensated thrust measuring gage for measuring forces as function of time in environment with varying temperature
- [NASA-CASE-IGS-02319] c14 N71-22965
Development and characteristics of self-calibrating displacement transducer for measuring magnitude and frequency of displacement of bodies
- [NASA-CASE-XLA-00781] c09 N71-22999
Design, development, and characteristics of pressure and temperature sensor operating immersed in fluid flow
- [NASA-CASE-LEW-10281-1] c14 N72-17327
Development of apparatus for mounting scientific experiments in spacecraft to permit utilization without maneuvering spacecraft
- [NASA-CASE-MSC-12372-1] c31 N72-25842
- INSULATED STRUCTURES**
Low thermal loss piping arrangement for moving cryogenic media through double chamber structure
- [NASA-CASE-IXP-08882] c15 N69-39935
- INSULATION**
Electrode attached to helmets for detecting low level signals from skin of living creatures
- [NASA-CASE-ARC-10043-1] c05 N71-11193
Characteristics of foamed-in-place ceramic refractory insulating material and method of fabrication
- [NASA-CASE-IGS-02435] c18 N71-22998
Method of fabricating equal length insulated wire
- [NASA-CASE-FRC-10038] c15 N72-20444
Inductance device with vacuum insulation and materials of low gas entrapping capability
- [NASA-CASE-LEW-10330-1] c09 N72-27226
Insulated electrocardiographic electrodes --- without paste electrolyte
- [NASA-CASE-MSC-14339-1] c05 N75-24716
Silica reusable surface insulation
- [NASA-CASE-ARC-10721-1] c27 N76-22376
Two-component ceramic coating for silica insulation
- [NASA-CASE-MSC-14270-1] c27 N76-22377
Three-component ceramic coating for silica insulation
- [NASA-CASE-MSC-14270-2] c27 N76-23426
- INSULATORS**
High voltage insulators for direct current in acceleration system of electrostatic thruster
- [NASA-CASE-XIE-01902] c28 N71-10574
High temperature resistant cermet and ceramic compositions --- for use in thermionic converters or diodes
- [NASA-CASE-NPO-13690-1] c27 N76-13294
- INTAKE SYSTEMS**
Deflector for preventing objects from entering nacelle inlets of jet aircraft
- [NASA-CASE-XIE-00388] c28 N70-34788
The engine air intake system
- [NASA-CASE-ARC-10761-1] c07 N77-18154
Fluid sampling device
- [NASA-CASE-GSC-12143-1] c35 N77-32456
- INTEGRATED CIRCUITS**
Computer circuit performing both counting and shifting logic operations also capable of miniaturization and integration in basic circuits
- [NASA-CASE-IXP-01753] c08 N71-22897
Development and characteristics of electric circuitry for detecting electrical pulses rise time and amplitude
- [NASA-CASE-IXP-08804] c09 N71-24717
Method and apparatus for testing integrated circuit microtab welds
- [NASA-CASE-ARC-10176-1] c15 N72-21464
Single integrated circuit chip with field effect transistor
- [NASA-CASE-GSC-10835-1] c09 N72-33205
Integrated circuit tangent function generator
- [NASA-CASE-MSC-13907-1] c10 N73-26230
Inverted geometry transistor for use with monolithic integrated circuit
- [NASA-CASE-ARC-10330-1] c09 N73-32112
Integrated circuit package with lead structure and method of preparing the same
- [NASA-CASE-MPS-21374-1] c33 N74-12951
Integrated P-channel MOS gyrator
- [NASA-CASE-MPS-22343-1] c33 N74-34638
- Four phase logic systems --- including integrated microcircuits
- [NASA-CASE-MSC-14240-1] c33 N75-14957
Integrable power gyrator --- with Z-matrix design using parallel transistors
- [NASA-CASE-MPS-22342-1] c33 N75-30428
- INTEGRATORS**
Solid state operational integrator
- [NASA-CASE-NFO-10230] c09 N71-12520
Variable duration pulse integrator design for integrating pulse duration modulated pulses with elimination of ripple content
- [NASA-CASE-XLA-01219] c10 N71-23084
Solid state integrator for converting variable width pulses into analog voltage
- [NASA-CASE-XLA-03356] c10 N71-23315
Feedback integrating circuit with grounded capacitor for signal processing
- [NASA-CASE-XAC-10607] c10 N71-23669
High speed phase detector design indicating phase relationship between two square wave input signals
- [NASA-CASE-IXP-01306-2] c09 N71-24596
- INTERFEROMETERS**
Describing device for velocity control of electromechanical drive mechanism of scanning mirror of interferometer
- [NASA-CASE-IGS-03532] c14 N71-17627
Incremental motion drive system applied to interferometer components
- [NASA-CASE-IXP-08897] c15 N71-17694
Design and development of optical interferometer with laser light source for application to schlieren systems
- [NASA-CASE-XLA-04295] c16 N71-24170
Digital sensor for counting fringes produced by interferometers with improved sensitivity and one photomultiplier tube to eliminate alignment problem
- [NASA-CASE-LAR-10204] c14 N71-27215
Two beam interferometer-polarimeter
- [NASA-CASE-NPO-11239] c14 N73-12446
Interferometer prism and control system for precisely determining direction to remote light source
- [NASA-CASE-ARC-10278-1] c14 N73-25463
Method and apparatus for providing a servodrive signal in a high speed stepping interferometer
- [NASA-CASE-NPO-13569-1] c35 N75-21600
High resolution Fourier interferometer-spectrophotopolarimeter
- [NASA-CASE-NPO-13604-1] c35 N76-31490
Method and apparatus for providing a servo drive signal in a high-speed stepping interferometer
- [NASA-CASE-NPO-13569-2] c33 N77-28395
- INTERMEDIATE FREQUENCY AMPLIFIERS**
Multichannel logarithmic RF level detector
- [NASA-CASE-LAR-11021-1] c32 N76-14321
- INTERMETALLICS**
Controlled diffusion reaction process for masking substrate of twisted multifilament superconductive ribbon
- [NASA-CASE-LEW-11726-1] c26 N73-26752
Production of intermetallic compounds by effect of shock waves from explosions and compaction of powder
- [NASA-CASE-MPS-20861-1] c18 N73-32437
- INTERNAL COMBUSTION ENGINES**
Variable displacement fuel pump for internal combustion engines
- [NASA-CASE-MSC-12139-1] c28 N71-14058
Detonation reaction engine comprising outer housing enclosing pair of inner walls for continuous flow
- [NASA-CASE-IXP-06926] c28 N71-22983
Development of system for preheating vaporized fuel for use with internal combustion engines
- [NASA-CASE-NFO-12072] c28 N72-22772
System for minimizing internal combustion engine pollution emission
- [NASA-CASE-NFO-13402-1] c37 N76-18457
Hydrogen-fueled engine
- [NASA-CASE-NPO-13763-1] c37 N77-11398
Internal combustion engine with electrostatic discharging fuels
- [NASA-CASE-NPO-13798-1] c37 N77-25535
Combustion engine --- for air pollution control
- [NASA-CASE-NPO-13671-1] c37 N77-31497

- Indicated mean effective pressure instrument (IMEP)
[NASA-CASE-LEW-12661-1] c35 N77-32461
- INTERPLANETARY SPACE**
Compact heat shielding for interplanetary space vehicles
[NASA-CASE-XMS-00486] c33 N70-33344
Active RC filter networks and amplifiers for deep space magnetic field measurement
[NASA-CASE-XAC-05462-2] c10 N72-17171
- INTERPLANETARY SPACECRAFT**
Transpirationally cooled heat ablation system for interplanetary spacecraft reentry shielding
[NASA-CASE-XMS-02677] c31 N70-42075
- INTERPLANETARY TRAJECTORIES**
Table structure and rotating magnet system simulating gravitational forces on spacecraft and displaying trajectories between Earth, Venus, and Mercury
[NASA-CASE-XNP-00708] c14 N70-35394
- INTRACRANIAL PRESSURE**
Induction powered biological radiosonde --- for measuring intracranial pressure
[NASA-CASE-ARC-11120-1] c52 N77-23743
- INTRAOCULAR PRESSURE**
Intra-ocular pressure normalization apparatus
[NASA-CASE-LEW-12955-1] c52 N77-30736
Intra-ocular pressure normalization technique and equipment
[NASA-CASE-LEW-12723-1] c52 N77-30737
- INTRAVEHICULAR ACTIVITY**
Intra- and extravehicular life support space suite for Apollo astronauts
[NASA-CASE-HSC-12609-1] c05 N73-32012
- INTRUSION**
Passive intrusion detection system
[NASA-CASE-NFO-13804-1] c35 N77-19390
- INVENTIONS**
Optical scanner
[NASA-CASE-LAR-11711-1] c74 N76-23985
- INVERTED CONVERTERS (DC TO AC)**
Inverter ratio failure detector
[NASA-CASE-NPO-13160-1] c35 N74-18090
Variable frequency inverter for ac induction motors with torque, speed and braking control
[NASA-CASE-NFS-22088-1] c33 N75-15874
- INVERTERS**
Silicon controlled rectifier inverter with compensation of transients to avoid false gating
[NASA-CASE-XIA-08507] c09 N69-39984
Inverter oscillator with voltage feedback
[NASA-CASE-NPO-10760] c09 N72-25254
- IODINE**
Method of producing output voltage from photovoltaic cell using poly-N-vinyl carbazole complexed with iodine
[NASA-CASE-NPO-10373] c03 N71-18698
Gallium arsenide solar cell preparation by surface deposition of cuprous iodide on thin n-type polycrystalline layers and heating in iodine vapor
[NASA-CASE-XNP-01960] c09 N71-23027
Iodine generator for reclaimed water purification
[NASA-CASE-HSC-14632-1] c54 N75-25594
- IODINE ISOTOPES**
Apparatus for producing high purity I-123 from Xe-123 by bombarding tellurium target with cyclotron beam
[NASA-CASE-LEW-10518-2] c24 N72-28714
Production of I-123 for use as radiopharmaceutical for low radiation exposure
[NASA-CASE-LEW-10518-1] c24 N72-33681
Apparatus for producing high purity I-123 --- for thyroid measurement
[NASA-CASE-LEW-10518-3] c31 N74-10476
Method of producing I-123 --- by bombardment of cesium causing spallation
[NASA-CASE-LEW-11390-2] c25 N76-27383
Production of I-123
[NASA-CASE-LEW-11390-3] c25 N76-29379
- ION ACCELERATORS**
Helium outgassing process for fused glass coating on ion accelerator grid
[NASA-CASE-LEW-10278-1] c15 N71-28582
- ION BEAMS**
Ion beam deflector system for electronic thrust vector control for ion propulsion yaw, pitch, and roll forces
[NASA-CASE-LEW-10689-1] c28 N71-26173
- Dispensing targets for ion beam particle generators
[NASA-CASE-NFO-13112-1] c73 N74-26767
Sputtering holes with ion beamlets
[NASA-CASE-LEW-11646-1] c20 N74-31269
Method of constructing dished ion thruster grids to provide hole array spacing compensation
[NASA-CASE-LEW-11876-1] c20 N76-21276
Ion beam thruster shield
[NASA-CASE-LEW-12082-1] c20 N77-10148
- ION CHARGE**
Quadrupole mass spectrometer using noise spectrum for ion separation and identification
[NASA-CASE-XNP-04231] c14 N73-32325
- ION CONCENTRATION**
Deposition of alloy films --- on irregularly shaped metal object
[NASA-CASE-LEW-11262-1] c27 N74-13270
- ION CURRENTS**
System for monitoring presence of neutrals in streams of ions - ion engine control
[NASA-CASE-XNP-02592] c24 N71-20518
- ION CYCLOTRON RADIATION**
Ion and electron detector for use in an ICR spectrometer
[NASA-CASE-NPO-13479-1] c35 N77-10492
- ION DENSITY (CONCENTRATION)**
Method and apparatus for measurement of trap density and energy distribution in dielectric films
[NASA-CASE-NPO-13443-1] c76 N76-20994
- ION ENGINES**
Improved cathode containing barium carbonate block and heated tungsten screen for electron bombardment ion thruster
[NASA-CASE-XLE-07087] c06 N69-39889
High-vacuum condenser tank for testing ion rocket engines
[NASA-CASE-XLE-00168] c11 N70-33278
Encapsulated heater forming hollow body for cathode used in ion thruster
[NASA-CASE-LEW-10814-1] c28 N70-35422
Electrostatic ion engines using high velocity electrons to ionize propellant
[NASA-CASE-XLE-00376] c28 N70-37245
Metal ion rocket engine design
[NASA-CASE-XLE-00342] c28 N70-37980
Dynamometer measuring microforce thrust produced by ion engine
[NASA-CASE-XLE-00702] c14 N70-40203
Increasing available power per unit area in ion rocket engine by increasing beam density
[NASA-CASE-XLE-00519] c28 N70-41576
Accel and focus electrode design for ion engine with improved efficiency
[NASA-CASE-XNP-02839] c28 N70-41922
Ion engine with magnetic circuit for optimal discharge
[NASA-CASE-XLE-01124] c28 N71-14043
Electron bombardment ion rocket engine with improved propellant introduction system
[NASA-CASE-XLE-02066] c28 N71-15661
System for monitoring presence of neutrals in streams of ions - ion engine control
[NASA-CASE-XNP-02592] c24 N71-20518
Construction and method of arranging plurality of ion engines to form cluster thereby increasing efficiency and control by decreasing heat radiated to space
[NASA-CASE-XNP-02923] c28 N71-23081
Electronic cathodes for use in electron bombardment ion thrusters
[NASA-CASE-XLE-04501] c09 N71-23190
Permanently magnetized ion engine casing construction for use in spacecraft propulsion systems
[NASA-CASE-XNP-06942] c28 N71-23293
Development and characteristics of ion thruster accelerator with single glass coated grid to provide increased ion extraction capability and larger diameter accelerator system
[NASA-CASE-LEW-10106-1] c28 N71-26642
Internal labyrinth and shield structure to improve electrical isolation of propellant feed source from ion thruster
[NASA-CASE-LEW-10210-1] c28 N71-26781
Low mass ionizing device for use in electric thrust spacecraft engines
[NASA-CASE-XNP-01954] c28 N71-28850

- Development of system for delivering vaporized mercury to electron bombardment ion engine
[NASA-CASE-NPO-10737] c28 N72-11709
- Characteristics of ion rocket engine with combination keeper electrode and electron baffle
[NASA-CASE-NPO-11880] c28 N73-24783
- Single grid accelerator system for electron bombardment type ion thruster
[NASA-CASE-XLE-10453-2] c28 N73-27699
- Method of making dishd ion thruster grids
[NASA-CASE-LEW-11694-1] c20 N75-18310
- Method of constructing dishd ion thruster grids to provide hole array spacing compensation
[NASA-CASE-LEW-11876-1] c20 N76-21276
- ION EXCHANGE MEMBRANE ELECTROLYTES**
- Inorganic ion exchange membrane electrolytes for fuel cell use
[NASA-CASE-XNP-04264] c03 N69-21337
- Development and characteristics of ion-exchange membrane and electrode assembly for fuel cells or electrolysis cells
[NASA-CASE-XMS-02063] c03 N71-29044
- Formulated plastic separators for soluble electrode cells --- rubber-ion transport sheeting
[NASA-CASE-LEW-12358-1] c44 N77-18560
- Dual membrane, hollow fiber fuel cell
[NASA-CASE-NPO-13732-1] c44 N77-19581
- ION EXCHANGING**
- Fuel system for thermal nuclear reactor which uses inorganic ion exchanger
[NASA-CASE-LEW-11645-2] c22 N73-28660
- ION EXTRACTION**
- Extraction and separation of a preferentially photo-dissociated molecular isotope into positive and negative ions by means of an electric field
[NASA-CASE-LEW-12465-1] c72 N76-27967
- ION IMPLANTATION**
- A complementary DMOS-V MOS integrated circuit structure
[NASA-CASE-GSC-12190-1] c33 N77-29403
- ION PROBES**
- Ion microprobe mass spectrometer with cooled electrode target for analyzing traces of fluids
[NASA-CASE-ERC-10014] c14 N71-28863
- ION PROPULSION**
- Variable thrust ion engine using thermal decomposition of solid cesium compound to produce propulsive vapor
[NASA-CASE-XNP-00923] c28 N70-36802
- Electrostatic ion engines using high velocity electrons to ionize propellant
[NASA-CASE-XLE-00376] c28 N70-37245
- Metal ion rocket engine design
[NASA-CASE-XLE-00342] c28 N70-37980
- Method for producing porous tungsten plates for ionizing cesium compounds for propulsion of ion engines
[NASA-CASE-XLE-00455] c28 N70-38197
- Accel and focus electrode design for ion engine with improved efficiency
[NASA-CASE-XNP-02839] c28 N70-41922
- Electric rocket engine with electron bombardment ionization chamber
[NASA-CASE-XNP-04124] c28 N71-21822
- Ion beam deflector system for electronic thrust vector control for ion propulsion yaw, pitch, and roll forces
[NASA-CASE-LEW-10689-1] c28 N71-26173
- Development and characteristics of ion thruster accelerator with single glass coated grid to provide increased ion extraction capability and larger diameter accelerator system
[NASA-CASE-LEW-10106-1] c28 N71-26642
- Development of system for delivering vaporized mercury to electron bombardment ion engine
[NASA-CASE-NPO-10737] c28 N72-11709
- Radial magnetic field for ion thruster
[NASA-CASE-LEW-10770-1] c28 N72-22770
- Automatic shunting of ion thruster magnetic field when thruster is not operating
[NASA-CASE-LEW-10835-1] c28 N72-22771
- Method of making dishd ion thruster grids
[NASA-CASE-LEW-11694-1] c20 N75-18310
- Apparatus for forming dishd ion thruster grids
[NASA-CASE-LEW-11694-2] c37 N76-14461
- Anode for ion thruster
[NASA-CASE-LEW-12048-1] c20 N77-20162
- ION PUMPS**
- Mass spectrometer with magnetic pole pieces providing the magnetic fields for both the magnetic sector and an ion-type vacuum pump
[NASA-CASE-NPO-13663-1] c35 N77-14406
- ION SOURCES**
- Apertured electrode focusing system for ion sources with nonuniform plasma density
[NASA-CASE-XNP-03332] c09 N71-10618
- Multilayer porous refractory metal ionizer design with thick, porous, large-grain substrates and thin, porous micron-grain substrates
[NASA-CASE-XNP-04338] c17 N71-23046
- Development and characteristics of ion thruster accelerator with single glass coated grid to provide increased ion extraction capability and larger diameter accelerator system
[NASA-CASE-LEW-10106-1] c28 N71-26642
- Low mass ionizing device for use in electric thrust spacecraft engines
[NASA-CASE-XNP-01954] c28 N71-28850
- Development and characteristics of apparatus for ionization analysis
[NASA-CASE-ARC-10017-1] c14 N72-29464
- Sputtering holes with ion beamlets
[NASA-CASE-LEW-11646-1] c20 N74-31269
- Multitarget sequential sputtering apparatus
[NASA-CASE-NPO-13345-1] c37 N75-19684
- ION TRAPS (INSTRUMENTATION)**
- Method and apparatus for measurement of trap density and energy distribution in dielectric films
[NASA-CASE-NPO-13443-1] c76 N76-20994
- IONIZATION CHAMBERS**
- Automatic baseline stabilization for ionization detector used in gas chromatograph
[NASA-CASE-XNP-03128] c10 N70-41991
- Electric rocket engine with electron bombardment ionization chamber
[NASA-CASE-XNP-04124] c28 N71-21822
- Multichannel photoionization chamber for measuring absorption, photoionization yield, and coefficients of gases
[NASA-CASE-EBC-10044-1] c14 N71-27090
- Development and characteristics of apparatus for ionization analysis
[NASA-CASE-ARC-10017-1] c14 N72-29464
- IONIZATION GAGES**
- Ionization vacuum gage
[NASA-CASE-XNP-00646] c14 N70-35666
- Ionization control system design for monitoring separately located ion gage pressures on vacuum chambers
[NASA-CASE-XLE-00787] c14 N71-21090
- Development and characteristics of apparatus for ionization analysis
[NASA-CASE-ARC-10017-1] c14 N72-29464
- Ionization gage for measuring ultrahigh vacuum levels
[NASA-CASE-XLA-05087] c14 N73-30391
- IONIZATION POTENTIALS**
- Electrodes having array of small surfaces for field ionization
[NASA-CASE-EBC-10013] c09 N71-26678
- IONIZED GASES**
- Plasma probes having guard ring and primary sensor at same potential to prevent stray wall current collection in ionized gases
[NASA-CASE-XLE-00690] c25 N69-39884
- Transient heat transfer gage for measuring total radiant intensity from far ultraviolet and ionized high temperature gases
[NASA-CASE-XNP-09802] c33 N71-15641
- Extraction and separation of a preferentially photo-dissociated molecular isotope into positive and negative ions by means of an electric field
[NASA-CASE-LEW-12465-1] c72 N76-27967
- IONIZERS**
- Description of electrical equipment and system for purification of waste water by producing silver ions for bacterial control
[NASA-CASE-HSC-10960-1] c03 N71-24718
- Method of making dishd ion thruster grids
[NASA-CASE-LEW-11694-1] c20 N75-18310
- IONIZING RADIATION**
- High voltage cable for use in high intensity ionizing radiation fields

[NASA-CASE-XNP-00738] c09 N70-38201
Reinforced polyquinoxaline gasket and method of
preparing the same --- resistant to ionizing
radiation and liquid hydrogen temperatures
[NASA-CASE-MFS-21364-1] c37 N74-18126

IONOSPHERE

Lightweight, rugged, inexpensive satellite
battery for producing electrical power from
ionosphere using electrodes with different
contact potentials
[NASA-CASE-XGS-01593] c03 N70-35408

IONS

Micrometeoroid analyzer using arrays of
interconnected capacitors and ion detector
[NASA-CASE-ARC-10443-1] c14 N73-20477

IRISES (MECHANICAL APERTURES)

Waveguide, thin film window and microwave irises
[NASA-CASE-LAR-10513-1] c07 N72-25170
Development of thin film microwave iris
installed in microwave waveguide transverse to
flow of energy in waveguide
[NASA-CASE-LAR-10511-1] c09 N72-29172

IRON ALLOYS

Tantalum modified ferritic iron base alloys ---
for use in high temperature environments
[NASA-CASE-LFW-12095-1] c26 N76-17233

IRRADIATION

Solar sensor with coarse and fine sensing
elements for matching preirradiated cells on
degradation rates
[NASA-CASE-XLA-01584] c14 N71-23269
Apparatus for obtaining isotropic irradiation on
film emulsion from parallel radiation source
[NASA-CASE-MFS-20095] c24 N72-11595
Production of pure metals
[NASA-CASE-LFW-10906-1] c25 N74-30502

IRRIGATION

Solar-powered pump
[NASA-CASE-NFO-13567-1] c44 N76-29701

ISOLATORS

Internal labyrinth and shield structure to
improve electrical isolation of propellant
feed source from ion thruster
[NASA-CASE-LFW-10210-1] c28 N71-26781

ISOPROPYL ALCOHOL

Preparation of fluorinated polyethers from
2-hydro-perhaloisopropyl alcohols
[NASA-CASE-MFS-11492] c06 N73-30102

ISOTHERMAL LAYERS

Double-wall isothermal cylinder containing heat
transfer fluid thermal reservoir as spacecraft
insulation cover
[NASA-CASE-MFS-20355] c33 N71-25353

ISOTHERMAL PROCESSES

General purpose rocket furnace
[NASA-CASE-MFS-23460-1] c09 N77-12070
Opto-mechanical subsystem with temperature
compensation through isothermal design
[NASA-CASE-GSC-12059-1] c35 N77-27366

ISOTOPE SEPARATION

Isotope separation using metallic vapor lasers
[NASA-CASE-NFO-13550-1] c36 N77-26477

J

JET AIRCRAFT

Deflector for preventing objects from entering
nacelle inlets of jet aircraft
[NASA-CASE-XLE-00388] c28 N70-34788

JET AIRCRAFT NOISE

Upper surface, external flow, jet-augmented flap
configuration for high wing jet aircraft for
noise reduction
[NASA-CASE-XLA-00087] c02 N70-33332
Jet aircraft exhaust nozzle for noise reduction
[NASA-CASE-LAR-10951-1] c28 N73-19819
Development of aircraft configuration for
reduction of jet aircraft noise by exhausting
engine gases over upper surface of wing
[NASA-CASE-LAR-11087-1] c02 N73-26008
Noise suppressor --- for turbofan engine by
incorporating annular acoustically porous
elements in exhaust and inlet ducts
[NASA-CASE-LAR-11141-1] c07 N74-32418
Abating exhaust noises in jet engines
[NASA-CASE-ARC-10712-1] c07 N74-33218
Instrumentation for measurement of aircraft
noise and sonic boom
[NASA-CASE-LAR-11173-1] c35 N75-19614

Cascade plug nozzle --- for jet noise reduction
[NASA-CASE-LAR-11674-1] c07 N76-18117
Apparatus and method for jet noise suppression
[NASA-CASE-LAR-11903-1] c07 N77-15036

JET AMPLIFIERS

Fluid jet amplifier with fluid from jet nozzle
deflected by inlet pressure
[NASA-CASE-XLE-03512] c12 N69-21466
Fluid control jet amplifiers
[NASA-CASE-XLE-09341] c12 N71-28741

JET BLAST EFFECTS

Separation mechanism for use between stages of
multistage rocket vehicles
[NASA-CASE-XLA-00188] c15 N71-22874

JET CONTROL

Attitude control device for space vehicles
[NASA-CASE-XNP-00294] c21 N70-36938

JET ENGINES

Absorptive, nonreflecting barrier mounted
between closely spaced jet engines on
supersonic aircraft, for preventing shock wave
interference
[NASA-CASE-XLA-02865] c28 N71-15563
Development of thrust dynamometer for measuring
performance of jet and rocket engines
[NASA-CASE-XLE-05260] c14 N71-20429
Afterburner-equipped jet engine nacelle with
slotted configuration afterbody
[NASA-CASE-XLA-10450] c28 N71-21493
Process for welding compressor and turbine
blades to rotors and discs of jet engines
[NASA-CASE-LFW-10533-1] c15 N73-28515
Variably positioned guide vanes for aerodynamic
choking
[NASA-CASE-LAR-10642-1] c07 N74-31270
Cascade plug nozzle --- for jet noise reduction
[NASA-CASE-LAR-11674-1] c07 N76-18117
Stator rotor tools
[NASA-CASE-MSC-16000-1] c07 N77-13062
The engine air intake system
[NASA-CASE-ARC-10761-1] c07 N77-18154

JET EXHAUST

Development of aircraft configuration for
reduction of jet aircraft noise by exhausting
engine gases over upper surface of wing
[NASA-CASE-LAR-11087-1] c02 N73-26008
Jet exhaust noise suppressor
[NASA-CASE-LFW-11286-1] c07 N74-27490
Reduction of nitric oxide emissions from a
combustor
[NASA-CASE-ARC-10814-2] c25 N77-31260

JET FLAPS

Upper surface, external flow, jet-augmented flap
configuration for high wing jet aircraft for
noise reduction
[NASA-CASE-XLA-00087] c02 N70-33332

JET FLOW

Two-phase flow system with discrete, impinging
two-phase jets
[NASA-CASE-NFO-11556] c12 N72-25292

JET MIXING FLOW

Fuel injection system for maximum combustion
efficiency of rocket engines
[NASA-CASE-XLE-00111] c28 N70-38199

JET NOZZLES

Fluid jet amplifier with fluid from jet nozzle
deflected by inlet pressure
[NASA-CASE-XLE-03512] c12 N69-21466
Thrust and attitude control apparatus using jet
nozzle in movable canard surface or fin
configuration
[NASA-CASE-XLE-03583] c31 N71-17629
Heater-mixer for stored fluids
[NASA-CASE-ARC-10442-1] c35 N74-15093

JET THRUST

System for aerodynamic control of rocket
vehicles by secondary injection of fluid into
nozzle exhaust stream
[NASA-CASE-XLA-01163] c21 N71-15582
Drive mechanism for operating reactance attitude
control system for aerospace bodies
[NASA-CASE-XNP-01598] c21 N71-15583

JETTISON SYSTEMS

Describing assembly for opening stabilizing and
decelerating flaps of flight capsules used in
space research
[NASA-CASE-XNP-03169] c31 N71-15675
System for deploying and ejecting releasable
clamshell fairing sections from spinning

sounding rockets
[NASA-CASE-GSC-10590-1] c31 N73-14853

JIGS
Apparatus for positioning modular components on a vertical or overhead surface
[NASA-CASE-LAR-11465-1] c37 N76-21554

JOINTS (ANATOMY)
Space suit with pressure-volume compensator system
[NASA-CASE-XLA-05332] c05 N71-11194
Equipotential space suits utilizing mechanical aids to minimize astronaut energy at bending joints
[NASA-CASE-LAR-10007-1] c05 N71-11195
Cord restraint system for pressure suit joints
[NASA-CASE-XMS-09635] c05 N71-24623
Orthotic arm joint --- for use in mechanical arms
[NASA-CASE-MFS-21611-1] c54 N75-12616
Rotational joint assembly for the prosthetic leg
[NASA-CASE-KSC-11008-1] c54 N77-30749

JOINTS (JUNCTIONS)
Hollow spherical electrode for shielding dielectric junction between high voltage conductor and insulator
[NASA-CASE-XLE-03778] c09 N69-21542
Elastic universal joint for rocket motor mounting
[NASA-CASE-XNP-00416] c15 N70-36947
Portable device for aligning surfaces of two adjacent wall or sheet sections for joining at point of junction
[NASA-CASE-XNP-01452] c15 N70-41371
Design and development of flexible joint for pressure suits
[NASA-CASE-XMS-09636] c05 N71-12344
Elbow forming in jacketed pipes while maintaining separation between core shape and jacket pipes
[NASA-CASE-XNP-10475] c15 N71-24679
Method and apparatus for precision sizing and joining of large diameter tubes by bulging or constricting overlapping ends
[NASA-CASE-XNP-05114-2] c15 N71-26148
Universal joints for connecting two displaced shafts or members
[NASA-CASE-NPO-10646] c15 N71-28467
Flexible bellows joint shielding sleeve for propellant transfer pipelines
[NASA-CASE-XNP-01855] c15 N71-28937
Mechanism for restraining universal joints to prevent separation while allowing bending, angulation, and lateral offset in any position about axis
[NASA-CASE-XNP-02278] c15 N71-28951
Diffusion welding in air --- solid state welding of butt joint by fusion welding, surface cleaning, and heating
[NASA-CASE-LEW-11387-1] c37 N74-18128
Bonded joint and method --- for reducing peak shear stress in adhesive bonds
[NASA-CASE-LAR-10900-1] c37 N74-23064
Flexible joint for pressurizable garment
[NASA-CASE-MSC-11072] c54 N74-32546
Method of making an explosively welded scarf joint
[NASA-CASE-LAR-11211-1] c37 N75-12326
Method of determining bond quality of power transistors attached to substrates --- X ray inspection of junction microstructure
[NASA-CASE-MFS-21931-1] c37 N75-26372
Externally supported internally stabilized flexible duct joint
[NASA-CASE-MFS-19194-1] c37 N76-14460
Wrist joint assembly
[NASA-CASE-MFS-23311-1] c37 N76-28554
Spacesuit mobility joints
[NASA-CASE-ARC-11058-1] c54 N77-15641

JOSEPHSON JUNCTIONS
Doped Josephson tunneling junction for use in a sensitive IR detector
[NASA-CASE-NPO-13348-1] c33 N75-31332

JOULE-THOMSON EFFECT
Gas balancing, cryogenic refrigeration apparatus with Joule-Thomson valve assembly
[NASA-CASE-NPO-10309] c15 N69-23190

JOURNAL BEARINGS
Slit regulated gas journal bearing
[NASA-CASE-XNP-00476] c15 N70-38620
Journal air bearing with cylindrical cup designed to ride on shaft
[NASA-CASE-MFS-20423] c15 N72-11388

Journal bearings --- for lubricant films
[NASA-CASE-LEW-11076-1] c37 N74-21061
Journal Bearings
[NASA-CASE-LEW-11076-2] c37 N74-32921
Lubricated journal bearing
[NASA-CASE-LEW-11076-3] c37 N75-30562
Fluid journal bearings
[NASA-CASE-LEW-11076-4] c37 N76-15461

JUNCTION DIODES
Phototransistor with base collector junction diode for integration into photo sensor arrays
[NASA-CASE-MFS-20407] c09 N73-19235
Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-2] c33 N75-25041
Charge storage diode modulators and demodulators
[NASA-CASE-NPO-10189-1] c33 N77-21314

JUNCTION TRANSISTORS
Apparatus for ballasting high frequency transistors
[NASA-CASE-XGS-05003] c09 N69-24318
Miniature piezoelectric semiconductor transducer with in situ stress coupling
[NASA-CASE-ERC-10087-2] c14 N72-31446
Method of determining bond quality of power transistors attached to substrates --- X ray inspection of junction microstructure
[NASA-CASE-MFS-21931-1] c37 N75-26372

K

KIDNEY DISEASES
Aldehyde-containing urea-absorbing polysaccharides
[NASA-CASE-NPO-13620-1] c27 N77-30236

KINETIC ENERGY
Non-reusable kinetic energy absorber for application in soft landing of space vehicles
[NASA-CASE-XLE-00810] c15 N70-34861

KINETIC FRICTION
Kinetic and static friction force measurement between magnetic tape and magnetic head surfaces
[NASA-CASE-XNP-08680] c14 N71-22995

KINETICS
Micrometeoroid analyzer using arrays of interconnected capacitors and ion detector
[NASA-CASE-ARC-10443-1] c14 N73-20477

L

LABORATORY EQUIPMENT
Design of mechanical device for stirring several test tubes simultaneously
[NASA-CASE-XAC-06956] c15 N71-21177
Gas purged dry box glove reducing permeation of air or moisture into dry box or isolator by diffusion through glove
[NASA-CASE-XLE-02531] c05 N71-23080
Apparatus and process for volumetrically dispensing reagent quantities of volatile chemicals for small batch reactions
[NASA-CASE-NPO-10070] c15 N71-27372
Development of variable angle device for positioning test tubes to permit optimum drying of culture medium
[NASA-CASE-LAR-10507-1] c11 N72-25284
Development of method for controlling vapor content of gas
[NASA-CASE-NPO-10633] c03 N72-28025
Apparatus for mixing two or more liquids under zero gravity conditions
[NASA-CASE-LAR-10195-1] c15 N73-19458
Automatic real-time pair-feeding system for animals
[NASA-CASE-ARC-10302-1] c51 N74-15778
Automated single-slide staining device
[NASA-CASE-LAR-11649-1] c51 N77-27677

LAMINAR FLOW
Laminar flow of liquid coolants in rocket engines
[NASA-CASE-NPO-10122] c12 N71-17631

LAMINATES
Multilayer porous refractory metal ionizer design with thick, porous, large-grain substrates and thin, porous micron-grain substrates
[NASA-CASE-XNP-04338] c17 N71-23046
Development and characteristics of polyimide impregnated laminates with fiberglass cloth backing for application as printed circuit boards
[NASA-CASE-MFS-20408] c18 N73-12604

- Development of composite structures for spacecraft to serve as anti-meteoroid device
[NASA-CASP-LAR-10788-1] c31 N73-20880
- Reinforced polyquinoxaline gasket and method of preparing the same --- resistant to ionizing radiation and liquid hydrogen temperatures
[NASA-CASE-MFS-21368-1] c37 N74-18126
- Method of laminating structural members
[NASA-CASE-XIA-11028-1] c24 N74-27035
- Lightweight electrically powered flexible thermal laminate --- made of metal fibers
[NASA-CASE-MSC-12662-1] c24 N75-16635
- Bonding method in the manufacture of continuous regression rate sensor devices
[NASA-CASE-LAR-10337-1] c24 N75-30260
- Transparent fire resistant polymeric structures
[NASA-CASE-ARC-10813-1] c27 N76-16230
- Honeycomb-laminate composite structure
[NASA-CASE-ARC-10913-1] c24 N76-26286
- Leading edge protection for composite blades
[NASA-CASE-LFW-12550-1] c24 N77-19170
- Low density bismaleimide-carbon microballoon composites
[NASA-CASE-ARC-11040-1] c24 N77-19173
- Composite lamination method --- of resin impregnated fiber tape
[NASA-CASE-LAR-12019-1] c24 N77-22179
- Hybrid composite laminate structures
[NASA-CASE-LFW-12118-1] c24 N77-27188
- LANDING AIDS**
- Electro-optical attitude sensing device for landing approach of flight vehicle
[NASA-CASE-XMS-01994-1] c14 N72-17326
- Magnetic method for detection of aircraft position relative to runway
[NASA-CASE-ARC-10179-1] c21 N72-22619
- LANDING GEAR**
- Pivotal shock absorbing assembly for use as load distributing portion in landing gear systems of space vehicles
[NASA-CASE-XMF-03856] c31 N70-34159
- Nose gear steering system for vehicles with main skids to provide directional stability after loss of aerodynamic control
[NASA-CASE-XLA-01804] c02 N70-34160
- Landing pad assembly for aerospace vehicles
[NASA-CASE-XMF-02853] c31 N70-36654
- Aircraft wheel spray drag alleviator for dual tandem landing gear
[NASA-CASE-XIA-01583] c02 N70-36825
- Spacecraft shock absorbing system for soft landings
[NASA-CASE-XMF-02108] c31 N70-36845
- Shock absorber for landing gear of lunar or planetary landing modules
[NASA-CASE-XMF-01045] c15 N70-40354
- Vertically descending flight vehicle landing gear for rough terrain
[NASA-CASE-XMF-01174] c02 N70-41589
- Crosswind landing gear position indicator
[NASA-CASE-LAR-11941-1] c06 N77-20098
- LANDING MODULES**
- Shock absorber for landing gear of lunar or planetary landing modules
[NASA-CASE-XMF-01045] c15 N70-40354
- LANDING SIMULATION**
- Lunar and planetary gravity simulator to test vehicular response to landing
[NASA-CASE-XLA-00493] c11 N70-34786
- LANTHANUM COMPOUNDS**
- Cesium thermionic converters having lanthanum hexaboride electrodes
[NASA-CASE-LFW-12038-2] c44 N77-32595
- LASER APPLICATIONS**
- High power laser apparatus and system
[NASA-CASE-XLE-2529-2] c36 N75-27364
- Fiber distributed feedback laser
[NASA-CASE-NFO-13531-1] c36 N76-24553
- Extraction and separation of a preferentially photo-dissociated molecular isotope into positive and negative ions by means of an electric field
[NASA-CASE-LFW-12465-1] c72 N76-27967
- Laser extensometer
[NASA-CASE-MFS-19259-1] c36 N77-10516
- Wind measurement system
[NASA-CASE-MFS-23362-1] c47 N77-10753
- Volumetric direct nuclear pumped laser
[NASA-CASE-LAR-12183-1] c36 N77-21424
- Pseudo-backscatter laser Doppler velocimeter employing antiparallel-reflector in the forward direction
[NASA-CASE-ARC-10970-1] c36 N77-25501
- Compact pulsed laser having improved heat conductance
[NASA-CASE-NFO-13147-1] c36 N77-25502
- LASER CAVITIES**
- Soft X-ray laser using crystal channels as distributed feedback cavities --- zeolites
[NASA-CASE-NFO-13532-1] c36 N75-15973
- LASER DOPPLER VELOCIMETERS**
- Dual wavelength scanning Doppler velocimeter --- without perturbation of flow fields
[NASA-CASE-ARC-10637-1] c35 N75-16783
- Combined dual scatter, local oscillator laser Doppler velocimeter
[NASA-CASE-ARC-10642-1] c36 N76-14447
- Focused laser Doppler velocimeter
[NASA-CASE-MFS-23178-1] c35 N77-10493
- Pseudo-backscatter laser Doppler velocimeter employing antiparallel-reflector in the forward direction
[NASA-CASE-ARC-10970-1] c36 N77-25501
- LASER HEATING**
- Electric power generation system directory from laser power
[NASA-CASE-NFO-13308-1] c36 N75-30524
- LASER MATERIALS**
- Laser head for simultaneous optical pumping of several dye lasers --- with single flash lamp
[NASA-CASE-LAR-11341-1] c36 N75-19655
- LASER MODE LOCKING**
- Laser system with an antiresonant optical ring
[NASA-CASE-BQN-10844-1] c36 N75-19653
- Dually mode locked Nd:YAG laser
[NASA-CASE-GSC-11746-1] c36 N75-19654
- Length controlled stabilized mode-lock Nd:YAG laser
[NASA-CASE-GSC-11571-1] c36 N77-25499
- LASER MODES**
- Xenon flashlamp driver system for optical laser pumping
[NASA-CASE-ERC-10283] c16 N72-25485
- Acoustically controlled distributed feedback laser
[NASA-CASE-NFO-13175-1] c36 N75-31427
- LASER OUTPUTS**
- Method and apparatus using temperature control for wavelength tuning of liquid lasers
[NASA-CASE-ERC-10187] c16 N69-31343
- Describing laser Doppler velocimeter for measuring mean velocity and turbulence of fluid flow
[NASA-CASE-MFS-20386] c21 N71-19212
- Development of apparatus for amplitude modulation of diode laser by periodic discharge of direct current power supply
[NASA-CASE-XMS-04269] c16 N71-22895
- Doppler shifted laser beam as fluid velocity sensor
[NASA-CASE-XAC-10770-1] c16 N71-24828
- Calibrator for measuring and modulating or demodulating laser outputs
[NASA-CASE-XLA-03410] c16 N71-25914
- Method and apparatus for optically modulating light or microwave beam
[NASA-CASE-GSC-10216-1] c23 N71-26722
- Laser machining device with dielectric functioning as beam waveguide for mechanical and medical applications
[NASA-CASE-HQN-10541-2] c15 N71-27135
- Optical communication system with gas filled waveguide for laser beam transmission
[NASA-CASE-HQN-10541-4] c16 N71-27183
- Design and development of multichannel laser remote control system using modulated helium-neon laser as transmitter and light collector as receiving antenna
[NASA-CASE-LAR-10311-1] c16 N73-16536
- Performance of ac power supply developed for CO2 laser system
[NASA-CASE-GSC-11222-1] c16 N73-32391
- Thermomagnetic recording and magneto-optic playback system having constant intensity laser beam control
[NASA-CASE-NFO-11317-2] c36 N74-13205
- Apparatus for scanning the surface of a cylindrical body
[NASA-CASE-NFO-11861-1] c36 N74-20009

- Optically detonated explosive device
[NASA-CASE-NPO-11743-1] c28 N74-27425
- Clear air turbulence detector
[NASA-CASE-MFS-21244-1] c36 N75-15028
- Dually mode locked Nd:YAG laser
[NASA-CASE-GSC-11746-1] c36 N75-19654
- Laser head for simultaneous optical pumping of several dye lasers --- with single flash lamp
[NASA-CASE-LAR-11341-1] c36 N75-19655
- Acoustically controlled distributed feedback laser
[NASA-CASE-NPO-13175-1] c36 N75-31427
- Optical noise suppression device and method --- laser light exposing film
[NASA-CASE-MSC-12640-1] c74 N76-31998
- Length controlled stabilized mode-lock Nd:YAG laser
[NASA-CASE-GSC-11571-1] c36 N77-25499
- Apparatus for photon excited catalysis
[NASA-CASE-NPO-13566-1] c25 N77-32255
- LASER PLASMAS**
- Continuous plasma laser --- method and apparatus for producing intense, coherent, monochromatic light from low temperature plasma
[NASA-CASE-XNP-04167-3] c36 N77-19416
- LASER RANGER/TRACKER**
- Laser beam projector for continuous, precise alignment between target, laser generator, and astronomical telescope during tracking
[NASA-CASE-NPO-11087] c23 N71-29125
- LASERS**
- Laser device for removing material from rotating object for dynamic balancing
[NASA-CASE-MFS-11279] c16 N71-20400
- Design and development of optical interferometer with laser light source for application to schlieren systems
[NASA-CASE-XLA-04295] c16 N71-24170
- Self-generating optical frequency waveguide
[NASA-CASE-HQN-10541-1] c07 N71-26291
- Design and characteristics of laser camera system with diffusion filter of small particles with average diameter larger than wavelength of laser light
[NASA-CASE-NPO-10417] c16 N71-33410
- Optical sensing of supersonic flows by correlating deflections in laser beams through flow
[NASA-CASE-MFS-20642] c14 N72-21407
- Laser technique for breaking ice in ship path
[NASA-CASE-LAR-10815-1] c16 N72-22520
- Design of precision vertical alignment system using laser with gravitationally sensitive cavity
[NASA-CASE-ABC-10444-1] c16 N73-33397
- Tunable cavity resonator with ramp shaped supports
[NASA-CASE-HQN-10790-1] c36 N74-11313
- Short range laser obstacle detector --- for surface vehicles using laser diode array
[NASA-CASE-NPO-11856-1] c36 N74-15145
- Long range laser traversing system
[NASA-CASE-GSC-11262-1] c36 N74-21091
- Deep trap, laser activated image converting system
[NASA-CASE-NPO-13131-1] c36 N75-19652
- Laser system with an antiresonant optical ring
[NASA-CASE-HQN-10844-1] c36 N75-19653
- Acoustically controlled distributed feedback laser
[NASA-CASE-NPO-13175-1] c36 N75-31427
- Method and apparatus for splitting a beam of energy
[NASA-CASE-GSC-12083-1] c36 N76-15451
- Method and apparatus for generating coherent radiation in the ultra-violet region and above by use of distributed feedback
[NASA-CASE-NPO-13346-1] c36 N76-29575
- Polarization compensator for optical communications
[NASA-CASE-GSC-11782-1] c74 N76-30053
- Double discharge metal vapor laser with metal halide as a lasing
[NASA-CASE-NPO-13448-2] c36 N77-24469
- Gregorian all-reflective optical system
[NASA-CASE-GSC-12058-1] c74 N77-26942
- Wideband heterodyne receiver for laser communication system
[NASA-CASE-GSC-12053-1] c32 N77-28346
- LATCHES**
- Bolt-latch mechanism for releasing despin weights from space vehicle
[NASA-CASE-XLA-00679] c15 N70-38601
- Transparent polycarbonate resin, shell helmet and latch design for high altitude and space flight
[NASA-CASE-XMS-04935] c05 N71-11190
- Quick disconnect latch and handle combination for mounting articles on walls or supporting bases in spacecraft under zero gravity conditions
[NASA-CASE-MFS-11132] c15 N71-17649
- Design, development, and characteristics of latching mechanism for operation in limited access areas
[NASA-CASE-XMS-03745] c15 N71-21076
- Latching mechanism with pivoting catch and self-contained spring ejector
[NASA-CASE-XLA-03538] c15 N71-24897
- Latch for fastening spacecraft docking rings
[NASA-CASE-MSC-15474-1] c15 N71-26162
- Latch mechanism
[NASA-CASE-MSC-12549-1] c37 N74-27903
- Load regulating latch
[NASA-CASE-MSC-19535-1] c37 N77-32499
- LATERAL CONTROL**
- Three-axis controller operated by hand-wrist motion for yaw, pitch, and roll control
[NASA-CASE-XAC-01404] c05 N70-41581
- Star sensor system for roll attitude control of spacecraft
[NASA-CASE-XNP-01307] c21 N70-41856
- Supersonic or hypersonic vehicle control system comprising elevons with hinge line sweep and free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088
- Vortex-lift roll-control device
[NASA-CASE-LAR-11868-2] c08 N77-31176
- LATHES**
- Rotary spindle lathe attachments for machining geometrical cones
[NASA-CASE-XMS-04292] c15 N71-22722
- Lathe tool and holder combination for machining resin impregnated fiberglass cloth laminates
[NASA-CASE-XLA-10470] c15 N72-21489
- LAUNCH ESCAPE SYSTEMS**
- Emergency escape cabin system for launch towers
[NASA-CASE-XKS-02342] c05 N71-11199
- Ejector for separating astronaut from ejection seat during prelaunch or initial launch phase of flight
[NASA-CASE-XMS-04625] c05 N71-20718
- LAUNCH VEHICLE CONFIGURATIONS**
- Rotating launch device for a remotely piloted aircraft
[NASA-CASE-ABC-10979-1] c09 N77-19076
- LAUNCH VEHICLES**
- Support techniques for restraint of slender bodies such as launch vehicles
[NASA-CASE-XLA-02704] c11 N69-21540
- Microleak detector mounted on weld seam of propellant tank of launch vehicle
[NASA-CASE-XMF-02307] c14 N71-10779
- LAUNCHING PADS**
- Launch pad missile release system with bending moment change rate reduction in thrust distribution structure at liftoff
[NASA-CASE-XMF-03198] c30 N70-40353
- Remotely actuated quick disconnect for tubular umbilical conduits used to transfer fluids from ground to rocket vehicle
[NASA-CASE-XLA-01396] c03 N71-12259
- Portable equipment for validating C band launch pad antennas and transmission lines used for spacecraft checkout
[NASA-CASE-XKS-10543] c07 N71-26292
- LEAD (METAL)**
- Lead-oxygen dc power supply system having a closed loop oxygen and water system
[NASA-CASE-MFS-23059-1] c44 N76-27664
- LEAD TELLURIDES**
- Bonding method for improving contact between lead telluride thermoelectric elements and tungsten electrodes
[NASA-CASE-XGS-04554] c15 N69-39786
- Procedure for segmenting lead telluride and silicon germanium thermoelectric elements to obtain composite elements effective over wide temperature range
[NASA-CASE-XGS-05718] c26 N71-16037
- LEADING EDGES**
- Leading edge design for hypersonic reentry

LEAKAGE

SUBJECT INDEX

- vehicles
[NASA-CASE-XLA-00165] c31 N70-33242
Construction of leading edges of surfaces for
aerial vehicles performing from subsonic to
above transonic speeds
[NASA-CASE-XLA-01486] c01 N71-23497
Leading edge protection for composite blades
[NASA-CASE-LEW-12550-1] c24 N77-19170
- LEAKAGE**
Rocket chamber leak test fixture using tubular
plug
[NASA-CASE-XFR-09479] c14 N69-27503
Microleak detector mounted on weld seam of
propellant tank of launch vehicle
[NASA-CASE-XMF-02307] c14 N71-10779
Fluid leakage detection system with automatic
monitoring capability
[NASA-CASE-LAR-10323-1] c12 N71-17573
Space suit using nonflexible material with low
leakage and providing protection against
thermal extremes, physical punctures, and
radiation with high mobility articulation
[NASA-CASE-XAC-07043] c05 N71-23161
Development of apparatus and method for testing
leakage of large tanks
[NASA-CASE-XMF-02392] c32 N71-24285
Gas leak detection in evacuated systems using
ultraviolet radiation probe
[NASA-CASE-ERC-10034] c15 N71-24896
Method for locating leaks in hermetically sealed
containers
[NASA-CASE-ERC-10045] c15 N71-24910
Volume displacement transducer for leak
detection in hermetically sealed semiconductor
devices
[NASA-CASE-ERC-10033] c14 N71-26672
Test chambers with orifice and helium mass
spectrometer for detecting leak rate of
encapsulated semiconductor devices
[NASA-CASE-ERC-10150] c14 N71-28992
Leak detector
[NASA-CASE-MFS-21761-1] c35 N75-15931
Vacuum leak detector
[NASA-CASE-LAR-11237-1] c35 N75-19612
- LEG (ANATOMY)**
An artificial leg employing a mechanical energy
storage device for hip disarticulation
[NASA-CASE-ARC-10916-1] c54 N76-26871
Actuator device for artificial leg
[NASA-CASE-MFS-23225-1] c52 N77-14735
Rotational joint assembly for the prosthetic leg
[NASA-CASE-KSC-11004-1] c54 N77-30749
- LENS DESIGN**
Device for measuring the contour of a surface
[NASA-CASE-LAR-11869-1] c35 N77-10497
- LENSES**
Lens assembly for solar furnace or solar simulator
[NASA-CASE-XNP-04111] c14 N71-15622
Camera adapter design for image magnification
including lens and illuminator
[NASA-CASE-XMF-03844-1] c14 N71-26474
Development and characteristics of Petzval type
objective including field shaping lens for
focusing light of specified wavelength band on
curved photoreceptor
[NASA-CASE-GSC-10700] c23 N71-30027
Noise elimination in coherent imaging system by
axial rotation of optical lense for spectral
distribution of degrading affects
[NASA-CASE-GSC-11133-1] c23 N72-11568
Photographic film restoration system using
Fourier transformation lenses and spatial filter
[NASA-CASE-MSC-12448-1] c14 N72-20394
Plural beam antenna with parabolic reflectors
[NASA-CASE-GSC-11013-1] c09 N73-19234
Spatial filter for Q-switched lasers
[NASA-CASE-LEW-12164-1] c36 N77-32478
- LENTICULAR BODIES**
Lenticular vehicle with foldable aerodynamic
control flaps and reaction jets for operation
above and within earth's atmosphere
[NASA-CASE-IGS-00260] c31 N70-37924
- LEVEL (HORIZONTAL)**
Hot-wire liquid level detector for cryogenic
propellants
[NASA-CASE-XLE-00454] c23 N71-17802
- LEVEL (QUANTITY)**
Gauge for measuring quantity of liquid in
spherical tank in reduced gravity
[NASA-CASE-XMS-06236] c14 N71-21007
Conversion of positive dc voltage to positive dc
voltage of lower amplitude
[NASA-CASE-XNP-14301] c09 N71-23188
- LEVELING**
Development of adjustable attitude guide block
for setting pins perpendicular to irregular
convex work surface
[NASA-CASE-XLA-07911] c15 N71-15571
Electrical switching device comprising
conductive liquid confined within square loop
of deformable nonconductive tubing also used
for leveling
[NASA-CASE-NFO-10037] c09 N71-19610
Adjustable support device with jacket screw for
altering distance between base and supported
member
[NASA-CASE-NPO-10721] c15 N72-27484
Automatically operable self-leveling load table
[NASA-CASE-MFS-22039-1] c09 N75-12968
Rotary leveling base platform
[NASA-CASE-ARC-10981-1] c35 N77-10498
- LIFE (DURABILITY)**
Hollow rolling element bearings
[NASA-CASE-LEW-11087-3] c37 N74-21064
- LIFE DETECTORS**
Use of enzyme hexokinase and glucose to reduce
inherent light levels of ATP in luciferase
compositions
[NASA-CASE-XGS-05533] c04 N69-27487
Describing method for lyophilization of
luciferase containing mixtures for use in life
detection reactions
[NASA-CASE-XGS-05532] c06 N71-17705
- LIFE RAFTS**
Inflatable stabilizing system for use on life
raft to reduce rocking and preclude capsizing
[NASA-CASE-MSC-12393-1] c02 N73-26006
Modification of one man life raft
[NASA-CASE-LAR-10241-1] c54 N74-14845
- LIFE SUPPORT SYSTEMS**
Shock absorbing couch for body support under
high acceleration or deceleration forces
[NASA-CASE-XMS-01240] c05 N70-35152
Portable environmental control and life support
system for astronaut in and out of spacecraft
[NASA-CASE-XMS-09632-1] c05 N71-11203
Design and development of flexible tunnel for
use by spacecrews in performing extravehicular
activities
[NASA-CASE-MSC-12243-1] c05 N71-24728
Development of improved convolute section for
pressurized suits to provide high degree of
mobility in response to minimum of applied
torque
[NASA-CASE-XMS-09637-1] c05 N71-24730
Development and characteristics of inflatable
structure to provide escape from orbit for
spacecrews under emergency conditions
[NASA-CASE-XMS-06162] c31 N71-28851
Chlorine generator for purifying water in life
support systems of manned spacecraft
[NASA-CASE-XLA-08913] c14 N71-28933
Open loop life support subsystem using breathing
bag as reservoir for EVA
[NASA-CASE-MSC-12411-1] c05 N72-20096
Device for removing air from water for use in
life support systems in manned space flight
[NASA-CASE-XLA-8914] c15 N73-12492
Intra- and extravehicular life support space
suite for Apollo astronauts
[NASA-CASE-MSC-12609-1] c05 N73-32012
Catalyst cartridge for carbon dioxide reduction
unit
[NASA-CASE-LAR-10551-1] c25 N74-12813
An improved cooling system for removing
metabolic heat from an hermetically sealed
spacesuit
[NASA-CASE-ARC-11059-1] c54 N77-14743
- LIFT DEVICES**
Device for handling heavy loads by distributing
forces
[NASA-CASE-XNP-04969] c11 N69-27466
Techniques for recovery of multistage rocket
vehicles by providing lifting surfaces on
individual sections
[NASA-CASE-XNP-00389] c31 N70-34176
Direct lift control system having flaps with
slots adjacent to their leading edge and

SUBJECT INDEX

LIGHTING EQUIPMENT

particularly adapted for lightweight aircraft
[NASA-CASE-LAR-10249-1] c02 N71-26110

Development of auxiliary lifting system to
provide ferry capability for entry vehicles
[NASA-CASE-LAR-10574-1] c11 N73-13257

High lift aircraft --- with improved stability,
control, performance, and noise characteristics
[NASA-CASE-LAR-11252-1] c05 N75-25914

Device for installing rocket engines
[NASA-CASE-MFS-19220-1] c20 N76-22296

Vortex-lift roll-control device
[NASA-CASE-LAR-11868-2] c08 N77-31176

LIFT DRAG RATIO
Design of ring wing vehicle of high
drag-to-weight ratio to withstand reentry
stress into low density atmosphere
[NASA-CASE-XIA-04901] c31 N71-24315

LIFTING BODIES
Techniques for recovery of multistage rocket
vehicles by providing lifting surfaces on
individual sections
[NASA-CASE-XMF-00389] c31 N70-34176

Graphic illustration of lifting body design
[NASA-CASE-FRC-10063] c01 N71-12217

Static force balancing system attached to
lifting body
[NASA-CASE-LAR-10348-1] c11 N73-12264

LIFTING REENTRY VEHICLES
Lenticular vehicle with foldable aerodynamic
control flaps and reaction jets for operation
above and within earth's atmosphere
[NASA-CASE-XGS-00260] c31 N70-37924

Variable geometry manned orbital vehicle having
high aerodynamic efficiency over wide speed
range and incorporating auxiliary pivotal wings
[NASA-CASE-XLA-03691] c31 N71-15674

Designing spacecraft for flight into space,
atmospheric reentry, and landing at selected
sites
[NASA-CASE-XAC-02058] c02 N71-16087

LIGHT (VISIBLE RADIATION)
Light baffle with oblate hemispheroid surface
and shading flange
[NASA-CASE-NFO-10337] c14 N71-15604

Maksutov spectrograph for low light level research
[NASA-CASE-XLA-10402] c14 N71-29041

Device for detection of combustion light
preceding gaseous explosions
[NASA-CASE-LAR-10739-1] c14 N73-16484

LIGHT AIRCRAFT
Direct lift control system having flaps with
slots adjacent to their leading edge and
particularly adapted for lightweight aircraft
[NASA-CASE-LAR-10249-1] c02 N71-26110

LIGHT BEAMS
Cylindrical reflector for resolving wide angle
light beam from telescope into narrow beam for
spectroscopic analysis
[NASA-CASE-XGS-08269] c23 N71-26206

Development and characteristics of optical
communications system based on modulation of
light beams
[NASA-CASE-XLA-01090] c16 N71-28963

Multiple pattern holographic information storage
and readout system
[NASA-CASE-ERC-10151] c16 N71-29131

LIGHT GAS GUNS
Implosion driven, light gas, hypervelocity gun
[NASA-CASE-XAC-05902] c11 N71-18578

LIGHT MODULATION
Optical retrodirective modulator with focus
spoiling reflector driven by modulation signal
[NASA-CASE-GSC-10062] c14 N71-15605

Modulating and controlling intensity of light
beam from high temperature source by
servocontrolled rotating cylinders
[NASA-CASE-XMS-04300] c09 N71-19479

Method and apparatus for optically modulating
light or microwave beam
[NASA-CASE-GSC-10216-1] c23 N71-26722

Development and characteristics of optical
communications system based on modulation of
light beams
[NASA-CASE-XLA-01090] c16 N71-28963

Lamp modulator for generating visual indication
of presence and magnitude of signal
[NASA-CASE-KSC-10565] c09 N72-25250

Polarization compensator for optical
communications

[NASA-CASE-GSC-11782-1] c74 N76-30053

LIGHT SCATTERING
Forward-scatter polarimeter for determining the
gaseous depolarization factor in the presence
of polluting polydispersed particles
[NASA-CASE-NFO-13756-1] c35 N76-14434

A 2 degree/90 degree laboratory scattering
photometer
[NASA-CASE-GSC-12088-1] c35 N76-17369

LIGHT SCATTERING METERS
System for the measurement of ultra-low stray
light levels --- light shields and baffles
[NASA-CASE-MFS-23513-1] c74 N77-14842

LIGHT SOURCES
Light radiation direction indicator with baffle
of two parallel grids
[NASA-CASE-INP-03930] c14 N69-24331

High intensity heat and light unit containing
quartz lamp elements protectively positioned
to withstand severe environmental stress
[NASA-CASE-XLA-00141] c09 N70-33312

Photosensitive light source device for detecting
unmanned spacecraft deviation from reference
attitude
[NASA-CASE-INP-00438] c21 N70-35089

Electro-optical detector for determining
position of light source
[NASA-CASE-INP-01059] c23 N71-21821

Optical system for selecting particular
wavelength light beams from multiple
wavelength light source
[NASA-CASE-ERC-10248] c14 N72-17323

Electro-optical stabilization of calibrated
light source
[NASA-CASE-MSC-12293-1] c14 N72-27411

Development of temperature compensated light
source with components and circuitry for
maintaining luminous intensity independent of
temperature variations
[NASA-CASE-ARC-10467-1] c09 N73-14214

Interferometer prism and control system for
precisely determining direction to remote
light source
[NASA-CASE-ARC-10278-1] c14 N73-25463

Attitude sensor
[NASA-CASE-LAR-10586-1] c19 N74-15089

Very high intensity light source using a cathode
ray tube --- electron beams
[NASA-CASE-INP-01296] c33 N75-27250

Electric arc light source having undercut
recessed anode
[NASA-CASE-ARC-10266-1] c33 N75-29318

Uniform variable light source
[NASA-CASE-NFO-11429-1] c74 N77-21941

LIGHT TRANSMISSION
Hybrid holographic system using reference,
transmitted, and reflected beams simultaneously
[NASA-CASE-MFS-20074] c16 N71-15565

Optical characteristics measuring apparatus
[NASA-CASE-INP-08840] c23 N71-16365

Optical monitor panel consisting of translucent
screen with test or meter information
projected onto it from rear for application in
control rooms of missile launching and
tracking stations
[NASA-CASE-IKS-03509] c14 N71-23175

Solar cell panel with light transmitting cover
plate
[NASA-CASE-NFO-10747] c03 N72-22042

Method and system for transmitting and
distributing optical frequency radiation
[NASA-CASE-EQM-10541-3] c23 N72-23695

Thin absorbing metallic film for increased
visible light transmission
[NASA-CASE-LAR-10836-1] c26 N72-27784

Transmitting and reflecting diffuser --- for
ultraviolet light
[NASA-CASE-LAR-10385-2] c70 N74-13436

Optical instrument employing reticle having
preselected visual response pattern formed
thereon
[NASA-CASE-ARC-10976-1] c74 N77-22950

LIGHTING EQUIPMENT
Sealed fluorescent tube light unit capable of
connection with other units to form string of
work lights
[NASA-CASE-IKS-05932] c09 N71-26787

Pressurized inert gas feed for lighting system
[NASA-CASE-KSC-10644] c09 N72-27227

LIGHTNING

Apparatus for determining distance to lightning strokes from single station by magnetic and electric field sensing antennas
[NASA-CASE-KSC-10698] c07 N73-20175

System for locating lightning strokes by coordination of directional antenna signals
[NASA-CASE-KSC-10729-1] c09 N73-32110

Monitoring and recording lightning strokes in predetermined area
[NASA-CASE-KSC-10728-1] c14 N73-32319

Lightning current measuring systems
[NASA-CASE-KSC-10807-1] c33 N75-26246

Remote lightning monitor system
[NASA-CASE-KSC-11031-1] c33 N77-21319

Lightning current waveform measuring system
[NASA-CASE-KSC-11018-1] c33 N77-21320

LIMITER CIRCUITS

Variable duration pulse integrator design for integrating pulse duration modulated pulses with elimination of ripple content
[NASA-CASE-XLA-01219] c10 N71-23084

Circuits for amplitude limiting of random noise inputs
[NASA-CASE-NFO-10169] c10 N71-24844

Velocity limiting safety system for motor driven research vehicle
[NASA-CASE-XLA-07473] c15 N71-24895

Low level signal limiter
[NASA-CASE-XLE-04791] c32 N74-22096

Inrush current limiter
[NASA-CASE-GSC-11789-1] c33 N77-14333

LINEAR ACCELERATORS

Linear accelerator frequency control system
[NASA-CASE-XGS-05441] c10 N71-22962

LINEAR RECEIVERS

Antenna array at focal plane of reflector with coupling network for beam switching
[NASA-CASE-GSC-10220-1] c07 N71-27233

LINEAR SYSTEMS

Linear three-tap feedback shift register
[NASA-CASE-NFO-10351] c08 N71-12503

Family of m-ary linear feedback shift register with binary logic
[NASA-CASE-NFO-11868] c10 N73-20254

LINEARITY

Semilinear bearing comprising two rows of roller bearings separated by spherical bearings and permitting rotational and translational movement
[NASA-CASE-XLA-02809] c15 N71-22982

Mechanical actuator wherein linear motion changes to rotational motion
[NASA-CASE-XGS-04548] c15 N71-24045

LINKAGES

Development of collapsible nozzle extension for rocket engines
[NASA-CASE-NFS-11497] c28 N71-16224

Design and construction of mechanical probe for determining if object is properly secured
[NASA-CASE-NFS-20760] c14 N72-33377

LIQUEFACTION

Ophthalmic liquefaction pump
[NASA-CASE-LEW-12051-1] c52 N75-33640

Improved tissue macerating instrument --- ophthalmic liquefaction pump
[NASA-CASE-LEW-12668-1] c52 N76-23837

LIQUID BEARINGS

Fatigue life of hybrid antifriction bearings at ultrahigh speeds
[NASA-CASE-LEW-11152-1] c15 N73-32359

LIQUID COOLING

Water cooled contactors for holding rotating carbon arc anode
[NASA-CASE-XMS-03700] c15 N69-24266

External device for liquid spray cooling of gas turbine blades
[NASA-CASE-XLE-00037] c28 N70-33372

Water cooled solenoid capable of producing magnetic field intensities up to 100 kilogauss
[NASA-CASE-XNP-01951] c09 N70-41929

Laminar flow of liquid coolants in rocket engines
[NASA-CASE-NFO-10122] c12 N71-17631

Space suit body heat exchanger design composed of thermal conductance yarn and liquid coolant loops
[NASA-CASE-XMS-09571] c05 N71-19439

Electric power system with circulatory liquid coolant cooling system
[NASA-CASE-NFS-14114-2] c09 N71-24807

Electric power system with thermionic diodes and circulatory liquid metal coolant lines
[NASA-CASE-NFS-14114] c33 N71-27862

Apparatus for liquid spray cooling of turbine blades
[NASA-CASE-XLE-00027] c33 N71-29152

Automatic control device for regulating inlet water temperature of liquid cooled spacesuit
[NASA-CASE-MSC-13917-1] c05 N72-15098

Automatic temperature control for liquid cooled space suit
[NASA-CASE-ARC-10599-1] c05 N73-26071

Heat exchanger system and method
[NASA-CASE-LAR-10799-2] c34 N76-17317

Closed loop spray cooling apparatus --- for particle accelerator targets
[NASA-CASE-LEW-11981-1] c37 N76-20486

Liquid cooled brassiere and method of diagnosing malignant tumors therewith
[NASA-CASE-ARC-11007-1] c52 N77-14736

LIQUID CRYSTALS

Development of combined velocimeter and accelerometer based on color changes in liquid crystalline material subjected to shear stresses
[NASA-CASE-ERC-10292] c14 N72-25410

Input signal measurement using liquid crystalline elements
[NASA-CASE-ERC-10275] c26 N72-25680

Real time liquid crystal image converter
[NASA-CASE-LAR-11206-1] c74 N74-30118

LIQUID FILLED SHELLS

Liquid rocket systems for propulsion and control of spacecraft
[NASA-CASE-XNP-00610] c28 N70-36910

Design and development of fluid sample collector
[NASA-CASE-XMS-06767-1] c14 N71-20435

Manufacture of fluid containers from fused coated polyester sheets having resealable septum
[NASA-CASE-NPO-10123] c15 N71-24835

Omnidirectional liquid filled accelerometer design with liquid and housing temperature compensation
[NASA-CASE-HQN-10780] c14 N71-30265

LIQUID FLOW

Reduced gravity liquid configuration simulator to study propellant behavior in rocket fuel tanks
[NASA-CASE-XLE-02624] c12 N69-39988

Liquid junction for glass electrode or pH meters
[NASA-CASE-NFO-10682] c15 N70-34699

Actuator using compressed gas as driving force to control valve handling large liquid flows
[NASA-CASE-XHQ-01208] c15 N70-35409

Two component valve assembly for cryogenic liquid transfer regulation
[NASA-CASE-XLE-00397] c15 N70-36492

Positive displacement flowmeter for measuring extremely low flows of fluid with self calibrating features
[NASA-CASE-XNP-02822] c14 N70-41994

High pressure liquid flow sight assembly for wide temperature range applications including cryogenic fluids
[NASA-CASE-XLE-02998] c14 N70-42074

Carrier liquid system containing bodies of ablative material
[NASA-CASE-LEW-10359-2] c33 N73-25952

Zero gravity liquid transfer device, using spiral shaped screen
[NASA-CASE-KSC-10626] c14 N73-27378

System for measuring Reynolds in a turbulently flowing fluid --- signal processing
[NASA-CASE-ARC-10755-2] c34 N76-27517

LIQUID HELIUM

Heat operated cryogenic electrical generator
[NASA-CASE-NFO-13303-1] c20 N75-24837

Helium refrigerator
[NASA-CASE-NFO-13435-1] c31 N76-14284

Cryostat system for temperatures on the order of 2 deg K or less
[NASA-CASE-NFO-13459-1] c31 N77-10229

Multistation refrigeration system
[NASA-CASE-NFO-13839-1] c31 N77-15219

LIQUID HYDROGEN

Development of thermal insulation material for insulating liquid hydrogen tanks in spacecraft
[NASA-CASE-XNP-05046] c33 N71-28892

Reinforced polyquinoxaline gasket and method of preparing the same --- resistant to ionizing

- radiation and liquid hydrogen temperatures
[NASA-CASE-MFS-21364-1] c37 N74-18126
- LIQUID INJECTION**
Thrust vector control by secondary injection of fluid into rocket nozzle flow field to separate exhaust flow
[NASA-CASE-XLE-00208] c28 N70-34294
System for aerodynamic control of rocket vehicles by secondary injection of fluid into nozzle exhaust stream
[NASA-CASE-XLA-01163] c21 N71-15582
Propellant injection assembly having individually removable and replaceable nozzles for liquid fueled rocket engines
[NASA-CASE-IMP-00968] c28 N71-15660
- LIQUID LASERS**
Method and apparatus using temperature control for wavelength tuning of liquid lasers
[NASA-CASE-ERC-10187] c16 N69-31343
- LIQUID LEVELS**
Inductive liquid level detection system
[NASA-CASE-XLE-01609] c14 N71-10500
- LIQUID METALS**
Magnetohydrodynamic generator for fixing nonconductive gas and liquid metal mist to form slugs
[NASA-CASE-XLE-02083] c03 N69-39983
Thermoelectric power conversion by liquid metal flowing through magnetic field
[NASA-CASE-IMP-00644] c03 N70-36803
Analytical test apparatus and method for determining oxygen content in alkali liquid metal
[NASA-CASE-XLE-01997] c06 N71-23527
Electric power system with thermionic diodes and circulatory liquid metal coolant lines
[NASA-CASE-MFS-14114] c33 N71-27862
Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
[NASA-CASE-IMP-08881] c17 N71-28747
Shell-side liquid metal boiler employing tube and shell heat exchanger
[NASA-CASE-NFC-10831] c33 N72-20915
U shaped heated tube for distillation and purification of liquid metals
[NASA-CASE-IMP-08124-2] c06 N73-13129
Electromagnetic flow rate meter --- for liquid metals
[NASA-CASE-LEW-10981-1] c35 N74-21018
Liquid metal slip ring
[NASA-CASE-LEW-12277-1] c33 N76-28472
Process for preparing liquid metal electrical contact device
[NASA-CASE-LEW-11978-1] c33 N77-26385
- LIQUID NITROGEN**
Transferring liquid nitrogen through vacuum chamber to cryopanel
[NASA-CASE-LAR-10031] c15 N72-22484
- LIQUID OXYGEN**
Dye penetrant and technique for nondestructive tests of solid surfaces contacted by liquid oxygen
[NASA-CASE-IMP-02221] c18 N71-27170
Flame-resistant liquid oxygen compatible neoprene rubber composition
[NASA-CASE-KSC-11020-1] c27 N77-23267
- LIQUID PHASES**
Method and feed system for separating and orienting liquid and vapor phases of liquid propellants in zero gravity environment
[NASA-CASE-XLE-01182] c27 N71-15635
Hydraulic apparatus for casting and molding of liquid polymers
[NASA-CASE-IMP-07659] c06 N71-22975
Mixed liquid and vapor phase analyzer design with thermocouples for relative heat transfer measurement
[NASA-CASE-NPO-10691] c14 N71-26199
Low gravity phase separator
[NASA-CASE-MSC-14773-1] c31 N75-32262
Cryogenic liquid sensor
[NASA-CASE-NPO-10619-1] c35 N77-21393
- LIQUID PROPELLANT ROCKET ENGINES**
High thrust annular liquid propellant rocket engine and exhaust nozzle design
[NASA-CASE-XLE-00078] c28 N70-33284
- Attitude and propellant flow control system for liquid propellant rocket vehicles
[NASA-CASE-IMP-00185] c21 N70-34539
Injector manifold assembly for bipropellant rocket engines providing for fuel propellant to serve as coolant
[NASA-CASE-IMP-00148] c28 N70-38710
Collapsible auxiliary tank for restarting liquid propellant rocket motors under zero gravity
[NASA-CASE-IMP-01390] c28 N70-41275
Rocket propellant injector with porous faceplate for rocket engine combustion chamber
[NASA-CASE-LEW-11071-1] c27 N73-27695
Supersonic-combustion rocket
[NASA-CASE-LEW-11058-1] c20 N74-13502
Space vehicle
[NASA-CASE-MFS-22734-1] c18 N75-19329
- LIQUID ROCKET PROPELLANTS**
Propellant injectors for rocket combustion chambers
[NASA-CASE-XLE-00103] c28 N70-33241
Liquid rocket systems for propulsion and control of spacecraft
[NASA-CASE-IMP-00610] c28 N70-36910
Igniter capsule for chemical ignition of liquid rocket propellants
[NASA-CASE-XLE-00323] c28 N70-38505
High temperature spark plug for igniting liquid rocket propellants
[NASA-CASE-XLE-00660] c28 N70-39925
Compact high pressure filter for rocket fuel lines
[NASA-CASE-IMP-00732] c28 N70-41447
Venting device for liquid propellant storage tank using magnetic field to separate liquid and gaseous phases
[NASA-CASE-XLE-01449] c15 N70-41646
Liquid propellant tank design with semitoroidal bulkhead
[NASA-CASE-IMP-01899] c31 N70-41948
Method and feed system for separating and orienting liquid and vapor phases of liquid propellants in zero gravity environment
[NASA-CASE-XLE-01182] c27 N71-15635
Control valve and coaxial variable injector for controlling bipropellant mixture ratio and flow
[NASA-CASE-IMP-09702] c15 N71-17654
Slosh and swirl alleviator for liquid propellant tanks during transport and flight
[NASA-CASE-XLA-05749] c15 N71-19569
Filler valve design for supplying liquid propellants at high pressure to space vehicles
[NASA-CASE-IMP-01747] c15 N71-23024
Electronic recording system for spatial mass distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
[NASA-CASE-NPO-10185] c10 N71-26339
Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
[NASA-CASE-IMP-08881] c17 N71-28747
Response analyzing apparatus for liquid vapor interface sensor of sloshing rocket propellant
[NASA-CASE-MFS-11204] c14 N71-29134
- LIQUID SLOSHING**
Slosh damping method for liquid rocket propellant tanks
[NASA-CASE-IMP-00658] c12 N70-38997
Flexible ring slosh damping baffle for spacecraft fuel tank
[NASA-CASE-LAR-10317-1] c32 N71-16103
Submerged fuel tank baffles to prevent sloshing in liquid propellant rocket flight
[NASA-CASE-XLA-04605] c32 N71-16106
Hot-wire liquid level detector for cryogenic propellants
[NASA-CASE-XLE-00454] c23 N71-17802
Slosh and swirl alleviator for liquid propellant tanks during transport and flight
[NASA-CASE-XLA-05749] c15 N71-19569
Pressure sensor network for measuring liquid dynamic response in flight including fuel tank acceleration, liquid slosh amplitude, and fuel depth monitoring
[NASA-CASE-XLA-05541] c12 N71-26387
- LIQUID-GAS MIXTURES**
Liquid-gas separator adapted for use in zero gravity environment - drawings

[NASA-CASE-XMS-01624] c15 N70-40062
 Absorbent apparatus for separating gas from liquid-gas stream used in environmental control under zero gravity conditions
 [NASA-CASE-XMS-01492] c05 N70-41297
 Venting device for liquid propellant storage tank using magnetic field to separate liquid and gaseous phases
 [NASA-CASE-XLE-01449] c15 N70-41646
 Liquid-gaseous centrifugal separator for weightlessness environment
 [NASA-CASE-XLA-00415] c15 N71-16079
 Vapor-liquid separator design with vapor driven pump for separated liquid pumping for application in propellant transfer
 [NASA-CASE-XMF-04042] c15 N71-23023

LIQUID-VAPOR INTERFACES

Describing apparatus for separating gas from cryogenic liquid under zero gravity and for venting gas from fuel tank
 [NASA-CASE-XLE-00586] c15 N71-15968
 Liquid-vapor interface seal design for turbine rotating shafts including helical and molecular pumps and liquid cooling of mercury vapor
 [NASA-CASE-XNP-02862-1] c15 N71-26294
 Response analyzing apparatus for liquid vapor interface sensor of sloshing rocket propellant
 [NASA-CASE-MFS-11204] c14 N71-29134

LIQUIDS

Liquid-gas separator adapted for use in zero gravity environment - drawings
 [NASA-CASE-XMS-01624] c15 N70-40062
 Electrical switching device comprising conductive liquid confined within square loop of deformable nonconductive tubing also used for leveling
 [NASA-CASE-MFO-10037] c09 N71-19610
 Purification apparatus for vaporization and fractional distillation of liquids
 [NASA-CASE-XNP-08124] c15 N71-27184
 Quantitative liquid measurements in container by resonant frequencies
 [NASA-CASE-XNP-02500] c18 N71-27397
 Resonant infrasonic gauging device for measuring liquid quantity in closed bladderless reservoir
 [NASA-CASE-MSC-11847-1] c14 N72-11363
 Ablative system with liquid carrying ablative material bodies and forming self-replacing ablative surface
 [NASA-CASE-LEW-10359] c33 N72-25911
 Pressurized tank for feeding liquid waste into processing equipment
 [NASA-CASE-LAR-10365-1] c05 N72-27102
 Apparatus for mixing two or more liquids under zero gravity conditions
 [NASA-CASE-LAR-10195-1] c15 N73-19458
 Bimetallic fluid displacement apparatus --- for stirring and heating stored gases and liquids
 [NASA-CASE-ARC-10441-1] c35 N74-15126
 Method and device for detection of surface discontinuities or defects
 [NASA-CASE-MSC-14187-1] c35 N74-32879
 Automatic liquid inventory collecting and dispensing unit
 [NASA-CASE-LAR-11071-1] c35 N75-19611
 A 2 degree/90 degree laboratory scattering photometer
 [NASA-CASE-GSC-12088-1] c35 N76-17369
 Thermal energy storage system --- operating on superheating of liquids
 [NASA-CASE-MFS-23167-1] c44 N76-31667

LITHIUM COMPOUNDS

Utilization of lithium p-lithiophenoxide to prepare star polymers
 [NASA-CASE-MFO-10998-1] c06 N73-32029

LOAD DISTRIBUTION (FORCES)

Force measuring instrument for structural members, particularly fastening bolts or studs
 [NASA-CASE-XNP-00456] c14 N70-34705
 Multiple Belleville spring assembly with even load distribution
 [NASA-CASE-XNP-00840] c15 N70-38225
 Device for use in loading tension members --- characterized by elongated elastic body
 [NASA-CASE-MFS-21488-1] c14 N75-24794
 Pneumatic load compensating or controlling system
 [NASA-CASE-ARC-10907-1] c37 N75-32465

LOAD TESTING MACHINES

Load cell protection device using spring-loaded breakaway mechanism
 [NASA-CASE-XMS-06782] c32 N71-15974
 Development of device for transferring load from load cell to bypass mechanism
 [NASA-CASE-XMS-06329-1] c15 N71-20441
 Method and apparatus for tensile testing of metal foil
 [NASA-CASE-LAR-10208-1] c35 N76-18400

LOAD TESTS

Differential pressure cell insensitive to changes in ambient temperature and extreme overload
 [NASA-CASE-XAC-00042] c14 N70-34816

LOADING OPERATIONS

Air bearings for near frictionless transfer of loads from one body to another
 [NASA-CASE-XNP-01887] c15 N71-10617

LOADS (FORCES)

Device for handling heavy loads by distributing forces
 [NASA-CASE-XNP-04969] c11 N69-27466
 Two plane balance for simultaneous measurements of multiple forces
 [NASA-CASE-XAC-00073] c14 N70-34813
 Improving load capacity and fatigue life of rolling element systems in rockets and missiles
 [NASA-CASE-XLE-02999] c15 N71-16052
 Development of device for transferring load from load cell to bypass mechanism
 [NASA-CASE-XMS-06329-1] c15 N71-20441
 Valve assembly for controlling simultaneously more than one fluid flow, and having stable qualities under loads
 [NASA-CASE-XMS-05890] c09 N71-23191
 Solid state force measuring electromechanical transducers made of piezoresistive materials
 [NASA-CASE-ERC-10088] c26 N71-25490
 Turn on current transient limiter for controlling peak current flow in high capacity load
 [NASA-CASE-GSC-10413] c10 N71-26531
 Synchronous dc direct-drive system comprising multiple-loop hybrid control system controlling load directly connected to actuator
 [NASA-CASE-GSC-10065-1] c10 N71-27136
 Force balanced throttle valve for fuel control in rocket engines
 [NASA-CASE-MFO-10808] c15 N71-27432
 Energy absorption device in high precision gear train for protection against damage to components caused by stop loads
 [NASA-CASE-XNP-01848] c15 N71-28959
 Air bearing for use in exterior environment for moving heavy loads
 [NASA-CASE-WIP-10002] c15 N72-17451
 Measuring device for bearing preload using spring washers
 [NASA-CASE-MFS-20434] c11 N72-25288
 Variable direction force coupler for transmitting force along selectable curve path
 [NASA-CASE-MFS-20317] c15 N73-13463
 Versatile ergometer with work load control
 [NASA-CASE-MFS-21109-1] c05 N73-27941
 Three-axis adjustable loading structure
 [NASA-CASE-FRC-10051-1] c35 N74-13129
 G-load measuring and indicator apparatus --- for aircraft
 [NASA-CASE-ARC-10806] c06 N74-27872
 Spring operated accelerator and constant force spring mechanism therefor
 [NASA-CASE-ARC-10898-1] c35 N77-18417
 Penetrometer --- for determining load bearing characteristics of inclined surfaces
 [NASA-CASE-MFO-11103-1] c35 N77-27367
 Load regulating latch
 [NASA-CASE-MSC-19535-1] c37 N77-32499

LOCATES SYSTEM

System for locating lightning strokes by coordination of directional antenna signals
 [NASA-CASE-KSC-10729-1] c09 N73-32110
 Position determination systems --- using orbital antenna scan of celestial bodies
 [NASA-CASE-MSC-12593-1] c17 N76-21250

LOCKING

Releasable coupling device designed to receive and retain matching ends of electrical connectors

- [NASA-CASE-XMS-07846-1] c09 N69-21927
- LOCKS (FASTENERS)**
- Ball locking device which releases in response to small forces when subjected to high axial loads
- [NASA-CASE-XMF-01371] c15 N70-41829
- Low friction bearing and lock mechanism for two-axis gimbal carrying satellite payload
- [NASA-CASE-GSC-10556-1] c31 N71-26537
- Locking device for retaining turbine rotor blades on turbine wheel
- [NASA-CASE-XNP-00816] c28 N71-28928
- Longitudinal film gate and lock mechanism for securing film in motion picture cameras under vibration and high acceleration loads
- [NASA-CASE-LAR-10686] c14 N71-28935
- Design of quick release locking pin for joining two or more load-carrying structural members
- [NASA-CASE-MFS-18495] c15 N72-11385
- Locking mechanism for orthopedic braces
- [NASA-CASE-GSC-12082-1] c54 N76-22914
- Locking mechanism for orthopedic braces
- [NASA-CASE-GSC-12082-2] c52 N77-27694
- LOCOMOTION**
- Jet shoes for space locomotion
- [NASA-CASE-XLA-08491] c05 N69-21380
- Attitude control training device for astronauts permitting friction-free movement with five degrees of freedom
- [NASA-CASE-XMS-02977] c11 N71-10746
- Restraint torso for increased mobility and reduced physiological effects while wearing pressurized suits
- [NASA-CASE-MSC-12397-1] c05 N72-25119
- LOGARITHMIC RECEIVERS**
- Logarithmic circuit with wide dynamic range
- [NASA-CASE-GSC-12145-1] c33 N77-19319
- LOGARITHMS**
- Technique for deriving logarithm of input signal using exponentially varying electric signal inversely
- [NASA-CASE-ERC-10267] c09 N72-23173
- LOGIC CIRCUITS**
- Selective gold diffusion on monolithic silicon chips for switching and nonswitching amplifier devices and circuits and linear and digital logic circuits
- [NASA-CASE-XAC-10072] c09 N70-11148
- Counter-divisor circuit for accuracy and reliability in binary circuits
- [NASA-CASE-XNP-00421] c09 N70-34502
- Binary to binary-coded decimal converter using single set of logic circuits notwithstanding number of shift register decades
- [NASA-CASE-XNP-00432] c08 N70-35423
- Conversion system for increasing resolution of analog to digital converters
- [NASA-CASE-XAC-00404] c08 N70-40125
- Data processor having multiple sections activated at different times by selective power coupling to sections
- [NASA-CASE-XGS-04767] c08 N71-12494
- Binary sequence detector with few memory elements and minimized logic circuit complexity
- [NASA-CASE-XNP-05415] c08 N71-12505
- Bistable multivibrator circuits operating at high speed and low power dissipation
- [NASA-CASE-XGS-00823] c10 N71-15910
- Logic AND gate for fluid circuits
- [NASA-CASE-XLA-07391] c12 N71-17579
- Logic circuit to ripple add and subtract binary counters for spaceborne computers
- [NASA-CASE-XGS-04766] c08 N71-18602
- Constructing Exclusive-Or digital logic circuit in single module
- [NASA-CASE-XLA-07732] c08 N71-18751
- Stepping motor control apparatus exciting windings in proper time sequence to cause motor to rotate in either direction
- [NASA-CASE-GSC-10366-1] c10 N71-18772
- Serial digital decoder design with square circuit matrix and serial memory storage units
- [NASA-CASE-NPO-10150] c08 N71-24650
- Binary to decimal decoder logic circuit design with feedback control and display device
- [NASA-CASE-XKS-06167] c08 N71-24890
- Design and development of multistage current steering switch with inductively coupled magnetic cores
- [NASA-CASE-XNP-08567] c09 N71-26000
- Logic circuit for generating multibit binary code word in parallel
- [NASA-CASE-XNP-04623] c10 N71-26103
- Adaptive signal generating system and logic circuits for satellite television systems
- [NASA-CASE-GSC-11367] c10 N71-26374
- Transistorized switching logic circuits with tunnel diodes
- [NASA-CASE-GSC-10878-1] c10 N72-22236
- Logical function and circuit generator
- [NASA-CASE-XLA-05099] c09 N73-13209
- A synchronous binary array divider
- [NASA-CASE-ERC-10180-1] c60 N74-20836
- Four phase logic systems --- including integrated microcircuits
- [NASA-CASE-MSC-14240-1] c33 N75-14957
- An interleaving device --- for computer logic circuits used in optical data processing
- [NASA-CASE-GSC-12111-2] c60 N77-31800
- LOGICAL ELEMENTS**
- An interleaving device --- for computer logic circuits used in optical data processing
- [NASA-CASE-GSC-12111-2] c60 N77-31800
- LONGITUDINAL CONTROL**
- Three-axis controller operated by hand-wrist motion for yaw, pitch, and roll control
- [NASA-CASE-XAC-01404] c05 N70-41581
- LOOP ANTENNAS**
- Collapsible, space erectable loop antenna system for space vehicle
- [NASA-CASE-XNP-00437] c07 N70-40202
- Automatic carrier acquisition system for phase locked loop receiver
- [NASA-CASE-NPO-11628-1] c07 N73-30113
- LOOPS**
- Tape cartridge with high capacity storage of endless-loop magnetic tape
- [NASA-CASE-XGS-00769] c14 N70-41647
- Endless loop tape transport mechanism for driving and tensioning recording medium in magnetic tape recorder
- [NASA-CASE-XGS-01223] c07 N71-10609
- Filter for third order phase locked loops in signal receivers
- [NASA-CASE-NPO-11941-1] c10 N73-27171
- High speed shutter --- electrically actuated ribbon loop for shuttering optical or fluid passageways
- [NASA-CASE-ARC-10516-1] c70 N74-21300
- Means for accommodating large overstrain in lead wires --- by storing extra length of wire in stretchable loop
- [NASA-CASE-LAR-10168-1] c33 N74-22865
- Closed loop spray cooling apparatus
- [NASA-CASE-LEW-11981-2] c34 N77-32434
- LOW ASPECT RATIO**
- Aerospace configuration with low and high aspect ratio variability for high and low speed flight
- [NASA-CASE-XLA-00142] c02 N70-33286
- Aerodynamic configuration for aircraft capable of high speed flight and low drag for low speed takeoff or landing upon presently existing airfields
- [NASA-CASE-XLA-00806] c02 N70-34858
- LOW COST**
- Improved low cost substrates for polycrystalline solar cells --- for solar energy conversion
- [NASA-CASE-GSC-12022-2] c44 N76-26695
- Fabrication of polycrystalline solar cells on low-cost substrates
- [NASA-CASE-GSC-12022-1] c44 N76-28635
- Low cost solar energy collection system
- [NASA-CASE-NPO-13579-3] c44 N77-20566
- LOW DENSITY MATERIALS**
- Method and photodetector device for locating abnormal voids in low density materials
- [NASA-CASE-MFS-20044] c14 N71-28993
- Intumescent composition, foamed product prepared therewith and process for making same
- [NASA-CASE-ARC-10304-2] c27 N74-27037
- Mixing insert for foam dispensing apparatus
- [NASA-CASE-MFS-20607-1] c37 N76-19436
- LOW FREQUENCIES**
- Determining sway of buildings by low frequency device using pendulum
- [NASA-CASE-XNP-00479] c14 N70-34794
- LOW GRAVITY MANUFACTURING**
- Method for manufacturing mirrors in zero gravity

- environment
[NASA-CASE-MSC-12611-1] c12 N76-15189
- LOW MOLECULAR WEIGHTS**
Process for preparing high molecular weight polyaryloxysilanes from lower molecular weight forms
[NASA-CASE-XMF-08674] c06 N71-28807
- LOW NOISE**
Low phase noise frequency divider for use with deep space network communication system
[NASA-CASE-NFO-11569] c10 N73-26229
Reflected-wave maser --- low noise amplifier
[NASA-CASE-NFO-13490-1] c36 N76-31512
- LOW PRESSURE**
Flowmeters for sensing low fluid flow rate and pressure for application to respiration rate studies
[NASA-CASE-FRC-10022] c12 N71-26546
- LOW SPEED**
Variable geometry manned orbital vehicle having high aerodynamic efficiency over wide speed range and incorporating auxiliary pivotal wings
[NASA-CASE-XLA-03691] c31 N71-15674
Device utilizing RC rate generators for continuous slow speed measurement
[NASA-CASE-XMF-02966] c10 N71-24863
- LOW TEMPERATURE ENVIRONMENTS**
Flexible, frangible electrochemical cell and package for operation in low temperature environment
[NASA-CASE-XGS-10010] c03 N72-15986
- LOW TEMPERATURE TESTS**
Cryostat for flexure fatigue testing of composite materials
[NASA-CASE-XMF-02964] c14 N71-17659
Cryostat for use with horizontal fatigue testing machines at low temperatures
[NASA-CASE-XMF-10968] c14 N71-24234
- LOW THRUST**
Low thrust monopropellant engine
[NASA-CASE-GSC-12194-1] c20 N77-28219
- LOW VACUUM**
Vibration damping system operating in low vacuum environment for spacecraft mechanisms
[NASA-CASE-XMS-01620] c23 N71-15673
- LOW VOLTAGE**
High speed low level voltage commutating switch
[NASA-CASE-XAC-00060] c09 N70-39915
Flexible monopole antenna with broad bandwidth and low voltage standing wave ratio
[NASA-CASE-MSC-12101] c09 N71-18720
Circuit design for failure sensing and protecting low voltage electric generator and power transmission networks
[NASA-CASE-GSC-10114-1] c10 N71-27366
- LUBRICANTS**
Metallic film diffusion into metal or ceramic surfaces for boundary lubrication in aerospace environments
[NASA-CASE-XLE-01765] c18 N71-10772
Metallic film diffusion for boundary lubrication in aerospace engineering
[NASA-CASE-XLE-10337] c15 N71-24046
Fluorinated esters of polycarboxylic acid and lubricating compositions for use at extreme temperature
[NASA-CASE-MFS-21040-1] c06 N73-30098
Thiophenyl ether disiloxanes and trisiloxanes useful as lubricant fluids
[NASA-CASE-MFS-22411-1] c37 N74-21058
Journal bearings --- for lubricant films
[NASA-CASE-LEW-11076-1] c37 N74-21061
- LUBRICATING OILS**
Fluid seal formed by flexible disk on rotating shaft to retain lubricating oils around shaft
[NASA-CASE-XLE-05130-2] c15 N71-19570
- LUBRICATION**
Hollow high strength rolling elements for antifriction bearings fabricated from preformed components
[NASA-CASE-LEW-11026-1] c15 N73-33383
Variable resistance constant tension and lubrication device --- using oil-saturated leather wiper
[NASA-CASE-KSC-10723-1] c37 N75-13265
Fluid journal bearings
[NASA-CASE-LEW-11076-4] c37 N76-15461
- LUBRICATION SYSTEMS**
Development of hybrid bearing lubrication system with combination of standard type lubrication and magnetic flux field for earth atmosphere and space environment operation
[NASA-CASE-XNP-01641] c15 N71-22997
Lubrication for bearings by capillary action from oil reservoir of porous material
[NASA-CASE-XNP-03972] c15 N71-23048
Journal Bearings
[NASA-CASE-LEW-11076-2] c37 N74-32921
- LUMINAIRES**
Visual target luminaires for retrofire attitude control
[NASA-CASE-XMS-12158-1] c31 N69-27499
Development of ultraviolet resonance lamp with improved transmission of radiation
[NASA-CASE-ARC-10030] c09 N71-12521
Lamp modulator for generating visual indication of presence and magnitude of signal
[NASA-CASE-KSC-10565] c09 N72-25250
Electrodeless lamp circuit driven by induction
[NASA-CASE-MFS-21214-1] c09 N73-30181
Uniform variable light source
[NASA-CASE-NFO-11429-1] c74 N77-21941
- LUMINOSITY**
Mechanism for measuring nanosecond time differences between luminous events using streak camera
[NASA-CASE-XLA-01987] c23 N71-23976
- LUMINOUS INTENSITY**
Filter arrangement for controlling light intensity in motion picture camera used in optical pyrometry
[NASA-CASE-XLA-00062] c14 N70-33254
Development of star intensity measuring system which minimizes effects of outside interference
[NASA-CASE-XNP-06510] c14 N71-23797
Continuous plasma laser --- method and apparatus for producing intense, coherent, monochromatic light from low temperature plasma
[NASA-CASE-XNP-04167-3] c36 N77-19416
Solar cell assembly --- for use under high intensity illumination
[NASA-CASE-LEW-11549-1] c44 N77-19571
Compact, high intensity arc lamp with internal magnetic field producing means
[NASA-CASE-NFO-11510-1] c33 N77-21315
- LUNAR BASES**
Development and characteristics of natural circulation radiator for use with nuclear power plants installed in lunar space stations
[NASA-CASE-XHQ-03673] c33 N71-29046
- LUNAR COMMUNICATION**
Conversion system for transforming slow scan rate of Apollo TV camera on moon to fast scan of commercial TV
[NASA-CASE-XMS-07168] c07 N71-11300
Three transceiver lunar emergency system to relay voice communication of astronaut
[NASA-CASE-MFS-21042] c07 N72-25171
- LUNAR COMPOSITION**
Development and characteristics of pentrometer for measuring physical properties of lunar surface
[NASA-CASE-XLA-00934] c14 N71-22765
- LUNAR EXPLORATION**
Backpack carrier with retractable legs suitable for lunar exploration and convertible to rescue vehicle
[NASA-CASE-LAR-10056] c05 N71-12351
Development and characteristics of pentrometer for measuring physical properties of lunar surface
[NASA-CASE-XLA-00934] c14 N71-22765
Lightweight propulsion unit for movement of personnel and equipment across lunar surface
[NASA-CASE-MFS-20130] c28 N71-27585
Three transceiver lunar emergency system to relay voice communication of astronaut
[NASA-CASE-MFS-21042] c07 N72-25171
- LUNAR GRAVITATION**
Apparatus for training astronaut crews to perform on simulated lunar surface under conditions of lunar gravity
[NASA-CASE-XMS-04798] c11 N71-21474
- LUNAR GRAVITY SIMULATOR**
Lunar and planetary gravity simulator to test vehicular response to landing
[NASA-CASE-XLA-00493] c11 N70-34786

LUNAR LANDING

Lunar landing flight research vehicle
[NASA-CASE-XPB-00929] c31 N70-34966

LUNAR LOGISTICS

Lightweight propulsion unit for movement of
personnel and equipment across lunar surface
[NASA-CASE-MFS-20130] c28 N71-27585

LUNAR ROCKS

Impact bit for cutting, collecting, and storing
samples such as lunar rock cuttings
[NASA-CASE-IMP-01412] c15 N70-42034

LUNAR SOIL

Development of device for separating,
collecting, and viewing soil particles
[NASA-CASE-IMP-09770] c15 N71-20440

Device which separates and screens particles of
soil samples for vidicon viewing in vacuum and
reduced gravity environments
[NASA-CASE-IMP-09770-3] c11 N71-27036

Portable penetrometer for analyzing soil
characteristics
[NASA-CASE-MFS-2C774] c14 N73-19420

Method for obtaining oxygen from lunar or
similar soil
[NASA-CASE-MSC-12408-1] c46 N74-13011

LUNAR SURFACE VEHICLES

Resilient vehicle wheel for lunar surface travel
[NASA-CASE-MFS-20400] c31 N71-18611

Resilient wheel design with woven wire tire and
abrasive treads for lunar surface vehicles
[NASA-CASE-MFS-13929] c15 N71-27091

LUNGS

Piston device for producing known constant
positive pressure within lungs by using
thoracic muscles
[NASA-CASE-XMS-01615] c05 N70-41329

M

MACHINE TOOLS

Rotary impact-type rock drill for recovering
rock cuttings
[NASA-CASE-IMP-07478] c14 N69-21923

Description of protective device for providing
safe operating conditions around work piece in
machine or metal working tool
[NASA-CASE-XL0-01092] c15 N71-22797

Description of device for aligning stacked
sheets of paper for repetitive cutting
[NASA-CASE-XMS-04178] c15 N71-22798

Development and characteristics of
frusto-conical die nib for extrusion of
refractory metals
[NASA-CASE-XLE-06773] c15 N71-23817

Design and development of layout tool for
machine shop use to locate point in precise
reference to straight or bowed reference edge
[NASA-CASE-FRC-10005] c15 N71-26145

Optical gauging system for monitoring machine
tool alignment
[NASA-CASE-XAC-09489-1] c15 N71-26673

Caterpillar micropositioner for positioning
machine tools adjacent to workpiece
[NASA-CASE-GSC-10780-1] c14 N72-16283

Geneva mechanism --- including star wheel and
driver
[NASA-CASE-NPO-13281-1] c37 N75-13266

Zero torque gear head wrench
[NASA-CASE-NPO-13059-1] c37 N76-20480

Precision alignment apparatus for cutting a
workpiece
[NASA-CASE-LAR-11658-1] c37 N77-14478

Adjustable chamfering tool
[NASA-CASE-NPO-10857-1] c37 N77-22478

MACHINERY

Design of mechanical device for stirring several
test tubes simultaneously
[NASA-CASE-XAC-06956] c15 N71-21177

Precipitation detector and mechanism for
stopping and restarting machinery at
initiation and cessation of rain
[NASA-CASE-XLA-02619] c10 N71-26334

Apparatus for forming drive belts
[NASA-CASE-NPO-13205-1] c31 N74-32917

MACHINING

Laser machining device with dielectric
functioning as beam waveguide for mechanical
and medical applications
[NASA-CASE-BQN-10541-2] c15 N71-27135

Lathe tool and holder combination for machining
resin impregnated fiberglass cloth laminates
[NASA-CASE-XLA-10470] c15 N72-21489

Drilled ball bearing with a one piece
anti-tipping cage assembly
[NASA-CASE-LEW-11925-1] c37 N75-31446

MAGNESIUM

Chemical spot test for identifying magnesium or
magnesium alloys used in aerospace applications
[NASA-CASE-LAR-10953-1] c17 N73-27446

MAGNESIUM ALLOYS

Procedure for bonding polytetrafluoroethylene
thermal protective sleeves to magnesium alloy
conical shell components with different
thermal coefficients
[NASA-CASE-XLA-01262] c15 N71-21404

Chemical spot test for identifying magnesium or
magnesium alloys used in aerospace applications
[NASA-CASE-LAR-10953-1] c17 N73-27446

MAGNESIUM OXIDES

Method for determining presence and type of OH
in MgO
[NASA-CASE-NPO-10774] c06 N72-17095

MAGNET COILS

Improved alternator with windings of
superconducting materials acting as permanent
magnet
[NASA-CASE-XLE-02824] c03 N69-39890

Relay circuit breaker with magnetic latching to
provide conductive and nonconductive paths for
current devices
[NASA-CASE-MSC-11277] c09 N71-29008

MAGNETIC CHARGE DENSITY

Ion engine with magnetic circuit for optimal
discharge
[NASA-CASE-XLE-01124] c28 N71-14043

MAGNETIC CIRCUITS

Ion engine with magnetic circuit for optimal
discharge
[NASA-CASE-XLE-01124] c28 N71-14043

MAGNETIC COILS

Time division multiplexer with magnetic latching
relays
[NASA-CASE-IMP-00431] c09 N70-38998

Linear magnetic braking system with nonuniformly
wrapped primary coil producing constant
braking force on secondary coil
[NASA-CASE-XLE-05079] c15 N71-17652

Electroexplosive safe-arm initiator using
electric driven electromagnetic coils and
magnets to align charge
[NASA-CASE-LAR-10372] c09 N71-18599

Magnifying image intensifier
[NASA-CASE-GSC-12010-1] c33 N76-23482

Independent gain and bandwidth control of a
traveling wave maser
[NASA-CASE-NPO-13801-1] c36 N76-31514

MAGNETIC CONTROL

Magnetically opened diaphragm design with camera
shutter and expansion tube applications
[NASA-CASE-XLA-03660] c15 N71-21060

Magnetically controlled plasma accelerator
capable of ignition in low density gaseous
environment
[NASA-CASE-XLA-00327] c25 N71-29184

Axially and radially controllable magnetic bearing
[NASA-CASE-GSC-11551-1] c37 N76-18459

Magnetic bearing system
[NASA-CASE-GSC-11978-1] c37 N77-17464

MAGNETIC CORES

Variable frequency magnetic coupled
multivibrator with temperature compensated
frequency control circuit
[NASA-CASE-XGS-00458] c09 N70-38604

Variable frequency magnetic coupled
multivibrator with output signal of constant
amplitude and waveform
[NASA-CASE-XGS-00131] c09 N70-38995

Electronic counter circuit utilizing magnetic
core and low power consumption
[NASA-CASE-IMP-08836] c09 N71-12515

Pulsed magnetic core memory element with
blocking oscillator feedback for interrogation
without loss of digital information
[NASA-CASE-XGS-03303] c08 N71-18595

Describing magnetic core current switching
device for steering bipolar current pulses to
memory units
[NASA-CASE-NPO-10201] c08 N71-18694

- Reliable magnetic core circuit apparatus with application in selection matrices for digital memories
[NASA-CASE-XNP-01318] c10 N71-23033
- Magnetic current regulator for saturable core transformer
[NASA-CASE-ERC-10075] c09 N71-24800
- Power switch with transfluxor type magnetic core
[NASA-CASE-NFO-10242] c09 N71-24803
- Unsaturating magnetic core transformer design with warning signal for electrical power processing equipment
[NASA-CASE-ERC-10125] c09 N71-24893
- Temperature sensitive magnetometer with pulsating thermally cycled magnetic core
[NASA-CASE-XAC-03740] c14 N71-26135
- Digital magnetic core memory with sensing amplifier circuits
[NASA-CASE-XNP-01012] c08 N71-28925
- Saturable magnetic core and signal detection for indicating impending saturation
[NASA-CASE-ERC-10089] c23 N72-17747
- Commutator for steering precisely controlled bidirectional currents through numerous loads by use of magnetic core shift registers
[NASA-CASE-NFO-10743] c08 N72-21199
- Banded transformer cores
[NASA-CASE-NPO-11966-1] c33 N74-17928
- MAGNETIC DIPOLES**
- Torque meter for determining magnitude of torque generated by interaction of magnetic dipole between test specimen and ambient magnetic field
[NASA-CASE-XGS-01013] c14 N71-23725
- MAGNETIC DISKS**
- Device for removing plastic dust cover from digital computer disk packs for inspection and cleaning
[NASA-CASE-LAR-10590-1] c15 N70-26819
- MAGNETIC FIELD CONFIGURATIONS**
- Mass spectrometer with magnetic pole pieces providing the magnetic fields for both the magnetic sector and an ion-type vacuum pump
[NASA-CASE-NFO-13663-1] c35 N77-14406
- MAGNETIC FIELD INVERSIONS**
- Magnifying image intensifier
[NASA-CASE-GSC-12010-1] c33 N76-23482
- MAGNETIC FIELDS**
- Magnetically diffused radial electric arc heater
[NASA-CASE-XLA-00330] c33 N70-34540
- Method and apparatus for communicating through ionized layer of gases surrounding spacecraft during reentry into planetary atmospheres
[NASA-CASE-XLA-01127] c07 N70-41372
- Venting device for liquid propellant storage tank using magnetic field to separate liquid and gaseous phases
[NASA-CASE-XLE-01449] c15 N70-41646
- Ion engine with magnetic circuit for optimal discharge
[NASA-CASE-XLE-01124] c28 N71-14043
- Development of wide range linear fluxgate magnetometer
[NASA-CASE-XGS-01587] c14 N71-15962
- Magnetic element position sensing device, using misaligned electromagnets
[NASA-CASE-XGS-07514] c23 N71-16099
- Development of non-magnetic indexing device for orienting magnetic flux sensing instrument in magnetic field without generation of detrimental magnetic fields
[NASA-CASE-XGS-02422] c15 N71-21529
- Negation of magnetic fields produced by thin waferlike circuit elements in space vehicles
[NASA-CASE-XGS-03390] c03 N71-23187
- Torque meter for determining magnitude of torque generated by interaction of magnetic dipole between test specimen and ambient magnetic field
[NASA-CASE-XGS-01013] c14 N71-23725
- Fluxgate magnetometer for measuring magnetic field along two axes using one sensor
[NASA-CASE-GSC-10441-1] c14 N71-27325
- Segmented superconducting magnet producing staggered magnetic field and suitable for broadband traveling wave masers
[NASA-CASE-XGS-10518] c16 N71-28554
- Magnetic method for detection of aircraft position relative to runway
[NASA-CASE-ARC-10179-1] c21 N72-22619
- Radial magnetic field for ion thruster
[NASA-CASE-LEW-10770-1] c28 N72-22770
- Automatic shunting of ion thruster magnetic field when thruster is not operating
[NASA-CASE-LEW-10835-1] c28 N72-22771
- Apparatus for determining distance to lighting strokes from single station by magnetic and electric field sensing antennas
[NASA-CASE-KSC-10698] c07 N73-20175
- Superconducting magnetic field trapping device for producing magnetic field in air
[NASA-CASE-XNP-01185] c26 N73-28710
- Electron beam controller --- using magnetic field to refocus spent electron beam in microwave oscillator tube
[NASA-CASE-LEW-11617-1] c33 N74-10195
- Magnetometer using superconducting rotating body
[NASA-CASE-NFO-13388-1] c35 N76-16390
- Atomic hydrogen storage method and apparatus --- in strong magnetic fields
[NASA-CASE-LEW-12081-1] c28 N76-22399
- Magnetic heat pumping
[NASA-CASE-LEW-12508-1] c34 N77-15343
- Compact, high intensity arc lamp with internal magnetic field producing means
[NASA-CASE-NFO-11510-1] c33 N77-21315
- MAGNETIC FLUX**
- Excitation and detection circuitry for flux responsive magnetic head
[NASA-CASE-XNP-04183] c09 N69-24329
- Cryogenic flux-gated magnetometer using superconductors
[NASA-CASE-XAC-02407] c14 N69-27423
- Flux gate magnetometer with toroidal gating coil and solenoidal output coil for signal modulation or amplification
[NASA-CASE-XGS-01881] c09 N70-40123
- Development of hybrid bearing lubrication system with combination of standard type lubrication and magnetic flux field for earth atmosphere and space environment operation
[NASA-CASE-XNP-01641] c15 N71-22997
- Magnetic current regulator for saturable core transformer
[NASA-CASE-ERC-10075] c09 N71-24800
- Magnetic flux pump for changing intensity of magnetic fields
[NASA-CASE-XNP-01187] c15 N73-28516
- Method for increasing intensity of magnetic field by transferring flux
[NASA-CASE-XNP-01188] c15 N73-32361
- Magnetic bearing --- for supplying magnetic fluxes
[NASA-CASE-GSC-11079-1] c37 N75-18574
- MAGNETIC FORMING**
- Portable magnetomotive hammer for metal working
[NASA-CASE-XNP-03793] c15 N71-24833
- Method and apparatus for portable high precision magnetomotive bulging, constricting, and joining of large diameter metal tubes
[NASA-CASE-XNP-05114-3] c15 N71-24865
- MAGNETIC INDUCTION**
- Continuous operation, single phased, induction plasma accelerator producing supersonic speeds
[NASA-CASE-XLA-01354] c25 N70-36946
- Automatic power supply circuit design for driving inductive loads and minimizing power consumption including solenoid example
[NASA-CASE-NFO-10716] c09 N71-24892
- Double-induction variable speed system for constant-frequency electrical power generation
[NASA-CASE-ERC-10065] c09 N71-27364
- Microwave generator using Gunn effect for magnetic tuning
[NASA-CASE-NFO-12106] c09 N73-15235
- High speed shutter --- electrically actuated ribbon loop for shuttering optical or fluid passageways
[NASA-CASE-ARC-10516-1] c70 N74-21300
- MAGNETIC LENSES**
- Quadrupole mass spectrometer using noise spectrum for ion separation and identification
[NASA-CASE-XNP-04231] c14 N73-32325
- MAGNETIC MATERIALS**
- Low density and low viscosity magnetic propellant for use under zero gravity conditions
[NASA-CASE-XLE-01512] c12 N70-40124
- MAGNETIC MEASUREMENT**
- Cryogenic flux-gated magnetometer using superconductors

SUBJECT INDEX

MAGNIFICATION

[NASA-CASE-XAC-02407] c14 N69-27423
Development of wide range linear fluxgate magnetometer
[NASA-CASE-IGS-01587] c14 N71-15962
Active RC filter networks and amplifiers for deep space magnetic field measurement
[NASA-CASE-XAC-05462-2] c10 N72-17171
Magnetometer using superconducting rotating body
[NASA-CASE-NPO-13388-1] c35 N76-16390

MAGNETIC POLES
Design of magnetohydrodynamic induction machine with end poles which produce compensating magnetic fields
[NASA-CASE-XNP-07481] c25 N69-21929
Mass spectrometer with magnetic pole pieces providing the magnetic fields for both the magnetic sector and an ion-type vacuum pump
[NASA-CASE-NPO-13663-1] c35 N77-14406

MAGNETIC PUMPING
Magnetic flux pump for changing intensity of magnetic fields
[NASA-CASE-XNP-01187] c15 N73-28516
Method for increasing intensity of magnetic field by transferring flux
[NASA-CASE-XNP-01188] c15 N73-32361
Magnetocaloric pump --- for cryogenic fluids
[NASA-CASE-LEW-11672-1] c37 N74-27904
Magnetic heat pumping
[NASA-CASE-LEW-12508-2] c34 N77-32435

MAGNETIC RECORDING
Development of data storage system for storing digital data in high density format on magnetic tape
[NASA-CASE-XNP-02778] c08 N71-22710
Magnetic recording head composed of ferrite core coated with thin film of aluminum-iron-silicon alloy
[NASA-CASE-GSC-10097-1] c08 N71-27210

MAGNETIC SIGNALS
Plural recorder system which limits signal recording to signals of sufficient interest
[NASA-CASE-XMS-06949] c09 N69-21467

MAGNETIC STORAGE
Nondestructive interrogating and state changing circuit for binary magnetic storage elements
[NASA-CASE-IGS-00174] c08 N70-34743
Magnetic matrix memory system for nondestructive reading of information contained in matrix
[NASA-CASE-XNP-05835] c08 N71-12504
Pulse duration control device for driving slow response time loads in selected sequence including switching and delay circuits and magnetic storage
[NASA-CASE-XGS-04224] c10 N71-26418
Redundant memory for enhanced reliability of digital data processing system
[NASA-CASE-GSC-10564] c10 N71-29135
Momentum wheel design for spacecraft attitude control and magnetic drum and head system for data storage
[NASA-CASE-NPO-11481] c21 N73-13644

MAGNETIC SUSPENSION
Magnetic suspension and pointing system
[NASA-CASE-LAR-11889-1] c19 N76-18227

MAGNETIC SWITCHING
Power switch with transfluxor type magnetic core
[NASA-CASE-NPO-10242] c09 N71-24803
Design and development of multistage current steering switch with inductively coupled magnetic cores
[NASA-CASE-XNP-08567] c09 N71-26000

MAGNETIC TAPE TRANSPORTS
Reel safety brake
[NASA-CASE-GSC-11960-1] c37 N77-14479

MAGNETIC TAPES
Tape cartridge with high capacity storage of endless-loop magnetic tape
[NASA-CASE-IGS-00769] c14 N70-41647
Endless loop tape transport mechanism for driving and tensioning recording medium in magnetic tape recorder
[NASA-CASE-IGS-01223] c07 N71-10609
Development of low friction magnetic recording tape
[NASA-CASE-IGS-00373] c23 N71-15978
System for recording and reproducing PCM data from data stored on magnetic tape
[NASA-CASE-IGS-01021] c08 N71-21042

Kinetic and static friction force measurement between magnetic tape and magnetic head surfaces
[NASA-CASE-XNP-08680] c14 N71-22995
Technique for recovery of voice data from heat damaged magnetic tape
[NASA-CASE-MSC-14219-1] c32 N74-27612
Magnetic tape head function switching system
[NASA-CASE-GSC-11956-1] c35 N75-25134
Automatic character skew and spacing checking network --- of digital tape drive systems
[NASA-CASE-GSC-11925-1] c33 N76-18353

MAGNETIC TRANSDUCERS
A miniature implantable ultrasonic echosonometer
[NASA-CASE-AEC-11035-1] c52 N77-15621

MAGNETIZATION
Permanently magnetized ion engine casing construction for use in spacecraft propulsion systems
[NASA-CASE-XNP-06942] c28 N71-23293

MAGNETO-OPTICS
Thermomagnetic recording and magneto-optic playback system having constant intensity laser beam control
[NASA-CASE-NPO-11317-2] c36 N74-13205

MAGNETOHYDRODYNAMIC FLOW
Improving performance of magnetoplasma dynamic arc rocket engine
[NASA-CASE-LEW-11180-1] c25 N73-25760

MAGNETOHYDRODYNAMIC GENERATORS
Design of magnetohydrodynamic induction machine with end poles which produce compensating magnetic fields
[NASA-CASE-XNP-07481] c25 N69-21929
Magnetohydrodynamic generator for mixing nonconductive gas and liquid metal mist to form slugs
[NASA-CASE-XLE-02083] c03 N69-39983
Thermoelectric power conversion by liquid metal flowing through magnetic field
[NASA-CASE-XNP-00644] c03 N70-36803
Crossed field MHD plasma generator-accelerator
[NASA-CASE-XLA-03374] c25 N71-15562

MAGNETOMETERS
Nonmagnetic thermal motor for magnetometer movement
[NASA-CASE-XAR-03786] c09 N69-21313
Cryogenic flux-gated magnetometer using superconductors
[NASA-CASE-XAC-02407] c14 N69-27423
Flux gate magnetometer with toroidal gating coil and solenoidal output coil for signal modulation or amplification
[NASA-CASE-IGS-01881] c09 N70-40123
Development of wide range linear fluxgate magnetometer
[NASA-CASE-IGS-01587] c14 N71-15962
Design and development of optically pumped resonance magnetometer for determining vectoral components in spatial coordinate system
[NASA-CASE-IGS-04879] c14 N71-20428
Temperature sensitive magnetometer with pulsating thermally cycled magnetic core
[NASA-CASE-XAC-03740] c14 N71-26135
Fluxgate magnetometer for measuring magnetic field along two axes using one sensor
[NASA-CASE-GSC-10441-1] c14 N71-27325
Hall effect magnetometer
[NASA-CASE-LEW-11632-2] c35 N75-13213
Magnetometer using superconducting rotating body
[NASA-CASE-NPO-13388-1] c35 N76-16390
Magnetic heading reference
[NASA-CASE-LAR-11387-1] c04 N76-20114
Actuator mechanism
[NASA-CASE-GSC-11883-2] c37 N77-15400
Magnetometer --- with an automatic scanning transducer
[NASA-CASE-LAR-11617-2] c35 N77-17430
Magnetic heading reference
[NASA-CASE-LAR-11387-2] c04 N77-19056

MAGNETRONS
Tuning arrangement for frequency control of magnetron-type electron discharge device
[NASA-CASE-XNP-09771] c09 N71-24841

MAGNETS
Magnetic electrical connectors for biomedical percutaneous implants
[NASA-CASE-RSC-11030-1] c52 N77-25772

MAGNIFICATION
Camera adapter design for image magnification

MAGNITUDE

including lens and illuminator
[NASA-CASE-XMF-03844-1] c14 N71-26474
Passive type, magnifying scratch gage, force
transducer
[NASA-CASE-LAR-10496-1] c14 N72-22437

MAGNITUDE

Torque meter for determining magnitude of torque
generated by interaction of magnetic dipole
between test specimen and ambient magnetic field
[NASA-CASE-XGS-01013] c14 N71-23725

MAINTENANCE

Self testing and repairing computer comprising
control and diagnostic unit and rollback
points for error correction
[NASA-CASE-NPO-10567] c08 N71-24633
Development of process for bonding resinous body
in cavities of honeycomb structures
[NASA-CASE-MSC-12357] c15 N73-12489
Method of repairing discontinuity in fiberglass
structures
[NASA-CASE-LAR-10416-1] c24 N74-30001

MALFUNCTIONS

Aircraft instrument for indicating malfunctions
during takeoff
[NASA-CASE-XIA-00100] c14 N70-36807

MANDRELS

Mandrel for shaping solid propellant rocket fuel
into engine casing
[NASA-CASE-XIA-00304] c27 N70-34783
Rotating, multisided mandrel for fabricating
gored inflatable spacecraft
[NASA-CASE-XIA-04143] c15 N71-17687
Method of making solid propellant rocket motor
having reliable high altitude capabilities,
long shelf life, and capable of firing with
nozzle closure with foamed plastic permanent
mandrel
[NASA-CASE-XIA-04126] c28 N71-26779

MANIFOLDS

Injector manifold assembly for bipropellant
rocket engines providing for fuel propellant
to serve as coolant
[NASA-CASE-XMF-00148] c28 N70-38710

MANIPULATORS

Manipulator for remote handling in zero gravity
environment
[NASA-CASE-MFS-14405] c15 N72-28495
Orthotic arm joint --- for use in mechanical arms
[NASA-CASE-MFS-21611-1] c54 N75-12616
Variable ratio mixed-mode bilateral master-slave
control system for shuttle remote manipulator
system
[NASA-CASE-MSC-14245-1] c18 N75-27041
Cooperative multitaxis sensor for teleoperation
of article manipulating apparatus
[NASA-CASE-NFO-13386-1] c54 N75-27758
Remotely operable articulated manipulator
[NASA-CASE-MFS-22707-1] c37 N76-15457
Remote manipulator system
[NASA-CASE-MFS-22022-1] c37 N76-15460
Wrist joint assembly
[NASA-CASE-MFS-23311-1] c37 N76-28554
An improved controller arm for a remotely
related slave arm
[NASA-CASE-ARC-11052-1] c54 N77-30751
Anthropomorphic master/slave manipulator system
[NASA-CASE-ARC-10756-1] c54 N77-32721
Compact artificial hand
[NASA-CASE-NFO-13906-1] c54 N77-32723

MANNED ORBITAL LABORATORIES

Artificial gravity system for simulating
self-locomotion capability of astronauts in
rotating environments
[NASA-CASE-XIA-03127] c11 N71-10776

MANNED ORBITAL RESEARCH LABORATORIES

Manned space station collapsible for launching
and self-erectable in orbit
[NASA-CASE-XIA-00678] c31 N70-34296
Radial module manned space station with
artificial gravity environment
[NASA-CASE-XMS-01906] c31 N70-41373

MANNED SPACE FLIGHT

Three-port transfer valve with one port open
continuously suitable for manned space flight
[NASA-CASE-XAC-01158] c15 N71-23051
Device for removing air from water for use in
life support systems in manned space flight
[NASA-CASE-XIA-8914] c15 N73-12492

SUBJECT INDEX

MANNED SPACECRAFT

Manned space capsule configuration for orbital
flight and atmospheric reentry
[NASA-CASE-XLA-00149] c31 N70-37938
Delta winged, manned reentry vehicle capable of
horizontal glide landing at low speeds
[NASA-CASE-XLA-00241] c31 N70-37986
Parachute system for lowering manned spacecraft
from post-reentry to ocean landing
[NASA-CASE-XLA-00195] c02 N70-38009
Design and configuration of manned space capsule
[NASA-CASE-XLA-01332] c31 N71-15664
Development of method for producing artificial
gravity in manned spacecraft
[NASA-CASE-XNP-02595] c31 N71-21881
Chlorine generator for purifying water in life
support systems of manned spacecraft
[NASA-CASE-XLA-08913] c14 N71-28933
Collapsible couch system for manned space vehicles
[NASA-CASE-MSC-13140] c05 N72-11085
Spacecraft with artificial gravity and earthlike
atmosphere
[NASA-CASE-LEW-11101-1] c31 N73-32750

MANOMETERS

Magnetically centered liquid column float
[NASA-CASE-XAC-00030] c14 N70-34820
Absolute pressure measuring device for measuring
gas density level in high vacuum range
[NASA-CASE-LAR-10000] c14 N73-30394

MANUAL CONTROL

Multiple circuit switch apparatus requiring
minimum hand and eye movement by operator
[NASA-CASE-XAC-03777] c10 N71-15909
Manual control mechanism for adjusting control
rod to null position
[NASA-CASE-XLA-01808] c15 N71-20740
Manually activated heat pump for mechanically
converting human operator output into heat
energy
[NASA-CASE-NFO-10677] c05 N72-11084
Development of flight simulator system to show
position of joystick displacement
[NASA-CASE-NFO-11497] c08 N73-25206
Solid state controller three axes controller
[NASA-CASE-MSC-12394-1] c08 N74-10942
G-load measuring and indicator apparatus
[NASA-CASE-ARC-10806-1] c35 N75-29381

MANUFACTURING

Selective gold diffusion on monolithic silicon
chips for switching and nonswitching amplifier
devices and circuits and linear and digital
logic circuits
[NASA-CASE-BEC-10072] c09 N70-11148
Standard coupling design for mass production
[NASA-CASE-XMS-02532] c15 N70-41808
Method for making screen with unlimited fineness
of mesh and screen thickness
[NASA-CASE-XLB-00953] c15 N71-15966
Describing apparatus for manufacturing
operations in low and zero gravity
environments of orbital space flight
[NASA-CASE-MFS-20410] c15 N71-19214
Manufacture of fluid containers from fused
coated polyester sheets having resealable septum
[NASA-CASE-NFO-10123] c15 N71-24835
Method of making solid propellant rocket motor
having reliable high altitude capabilities,
long shelf life, and capable of firing with
nozzle closure with foamed plastic permanent
mandrel
[NASA-CASE-XIA-04126] c28 N71-26779
Shielded flat conductor cable fabricated by
electroless and electrolytic plating
[NASA-CASE-MFS-13687] c09 N71-28691
Production method for manufacturing porous
tungsten bodies from tungsten powder particles
[NASA-CASE-XNP-04339] c17 N71-29137
Method of making porous conductive supports for
electrodes --- by electroforming and stacking
nickel foils
[NASA-CASE-GSC-11367-1] c44 N74-19692
Apparatus for forming drive belts
[NASA-CASE-NFO-13205-1] c31 N74-32917
Bonding method in the manufacture of continuous
regression rate sensor devices
[NASA-CASE-LAR-10337-1] c24 N75-30260
Process for fabricating SiC semiconductor devices
[NASA-CASE-LEW-12094-1] c76 N76-25049

- Solar hydrogen generator
[NASA-CASE-LAR-11361-1] c44 N77-22607
- Method of forming shrink-fit compression seal
[NASA-CASE-LAR-11563-1] c37 N77-23482
- Method for making a hot wire anemometer and product thereof
[NASA-CASE-AHC-10900-1] c35 N77-24454
- MAPPING**
- Solid state device for mapping flux and power in nuclear reactor cores
[NASA-CASE-XLE-00301] c14 N70-36808
- Design and development of random function tracer for obtaining coordinates of points on contour maps
[NASA-CASE-XLA-01401] c15 N71-21179
- Spacecraft transponder and ground station radar system for mapping planetary surfaces
[NASA-CASE-NFO-11001] c07 N72-21118
- MAPS**
- Orbital and entry tracking accessory for globes --- to provide range requirements for reentry vehicles to any landing site
[NASA-CASE-LAR-10626-1] c19 N74-21015
- Optical process for producing classification maps from multispectral data
[NASA-CASE-MSC-14472-1] c43 N77-10584
- MASERS**
- Segmented superconducting magnet producing staggered magnetic field and suitable for broadband traveling wave masers
[NASA-CASE-IGS-10518] c16 N71-28554
- Traveling wave maser for operation in 7 to 20 GHz frequency range
[NASA-CASE-NFO-11437] c16 N72-28521
- Reflected-wave maser --- low noise amplifier
[NASA-CASE-NFO-13490-1] c36 N76-31512
- Multistation refrigeration system
[NASA-CASE-NFO-13839-1] c31 N77-15219
- MASKING**
- Reusable masking boot for chemical machining operations
[NASA-CASE-XNP-02092] c15 N70-42033
- Composition and process for improving definition of resin masks used in chemical etching
[NASA-CASE-IGS-04993] c14 N71-17574
- MASS**
- Apparatus for measuring human body mass in zero or reduced gravity environment
[NASA-CASE-XNS-03371] c05 N70-42000
- Tuned damped vibration absorber for mass vibrating in more than one degree of freedom for use with wind tunnel models
[NASA-CASE-LAR-10083-1] c15 N71-27006
- Fluid mass sensor for a zero gravity environment
[NASA-CASE-MSC-14653-1] c35 N77-19385
- MASS BALANCE**
- Two plane balance for simultaneous measurements of multiple forces
[NASA-CASE-IAC-00073] c14 N70-34813
- Control system for pressure balance device used in calibrating pressure gages
[NASA-CASE-XNP-04134] c14 N71-23755
- MASS DISTRIBUTION**
- Electronic recording system for spatial mass distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
[NASA-CASE-NFO-10185] c10 N71-26339
- MASS FLOW**
- Rocket engine injector orifice to accommodate changes in density, velocity, and pressure, thereby maintaining constant mass flow rate of propellant into rocket combustion chamber
[NASA-CASE-XLE-03157] c28 N71-24736
- Mass flow meter containing beta source for measuring nonpolar liquid flow
[NASA-CASE-MFS-20485] c14 N72-11365
- Generation of high temperature, high mass flow, and high Reynolds number air at hypersonic speeds
[NASA-CASE-LAR-10578-1] c12 N73-25262
- MASS SPECTROMETERS**
- Analytical photoionization mass spectrometer with argon gas filter between light source and monochromator
[NASA-CASE-LAR-10180-1] c06 N71-13461
- Design and characteristics of time of flight mass spectrometer to measure or analyze gases at low pressures and time of flight of single gas molecule
[NASA-CASE-XNP-01056] c14 N71-23041
- Ion microprobe mass spectrometer with cooled electrode target for analyzing traces of fluids
[NASA-CASE-ERC-10014] c14 N71-28863
- Test chambers with orifice and helium mass spectrometer for detecting leak rate of encapsulated semiconductor devices
[NASA-CASE-ERC-10150] c14 N71-28992
- High speed scanner for measuring mass of preselected gases at high sampling rate
[NASA-CASE-LAR-10766-1] c14 N72-21432
- Apparatus for analyzing gas samples in containers including vacuum chamber, mass spectrometer, and gas chromatography
[NASA-CASE-GSC-10903-1] c14 N73-12444
- Quadrupole mass spectrometer using noise spectrum for ion separation and identification
[NASA-CASE-XNP-04231] c14 N73-32325
- Past scan control for deflection type mass spectrometers
[NASA-CASE-LAR-11428-1] c35 N74-34857
- Mass spectrometer with magnetic pole pieces providing the magnetic fields for both the magnetic sector and an ion-type vacuum pump
[NASA-CASE-NFO-13663-1] c35 N77-14406
- Method for fabricating a mass spectrometer inlet leak
[NASA-CASE-GSC-12077-1] c35 N77-24455
- MASS SPECTROSCOPY**
- Moving particle composition analyzer
[NASA-CASE-GSC-11889-1] c35 N76-16393
- Fluid sampling device
[NASA-CASE-GSC-12143-1] c35 N77-32456
- MATERIAL ABSORPTION**
- Describing sorption vacuum trap having housing with group of reentrant wall portions projecting into internal gas-permeous container filled with gas and vapor sorbent material
[NASA-CASE-XER-09519] c14 N71-18483
- MATERIALS HANDLING**
- Two component valve assembly for cryogenic liquid transfer regulation
[NASA-CASE-XLE-00397] c15 N70-36492
- Catalyst bed element removing tool
[NASA-CASE-XNP-00811] c15 N70-36901
- Air bearings for near frictionless transfer of loads from one body to another
[NASA-CASE-XNP-01887] c15 N71-10617
- Quick-release coupling for fueling rocket vehicles with cryogenic propellants
[NASA-CASE-XNS-01985] c15 N71-10782
- Method and apparatus for removing plastic insulation from wire using cryogenic equipment
[NASA-CASE-MFS-10340] c15 N71-17628
- Fluid transferring system design for purging toxic, corrosive, or noxious fluids and fumes from materials handling equipment for cleansing and accident prevention
[NASA-CASE-XNS-01905] c12 N71-21089
- Description of method for making homogeneous foamed materials in weightless environment using materials having different physical properties
[NASA-CASE-XNP-09902] c15 N72-11387
- Design and characteristics of mechanically extended and telescoping boom on crane assembly
[NASA-CASE-NFO-11118] c03 N72-25021
- Design and development of device to prevent clogging in hoppers containing particulate materials
[NASA-CASE-LAR-10961-1] c15 N73-14496
- Development of ultrasonic radiation equipment for removing material from host surface and vacuum apparatus for recovery of material
[NASA-CASE-NFO-11213] c15 N73-20514
- Development and characteristics of system for skin packaging articles using thermoplastic film heating and vacuum operated equipment
[NASA-CASE-MFS-20855] c15 N73-27405
- Apparatus for inserting and removing specimens from high temperature vacuum furnaces
[NASA-CASE-LAR-10841-1] c31 N74-27900
- Deployable flexible tunnel
[NASA-CASE-MFS-22636-1] c37 N76-22540

MATERIALS RECOVERY

- Pyrolysis system and process --- recovering energy from solid wastes containing hydrocarbons
[NASA-CASE-HSC-12669-1] c44 N76-16621
- Automated system for identifying traces of organic chemical compounds in aqueous solutions
[NASA-CASE-WFO-13063-1] c25 N76-18245

MATERIALS SCIENCE

- Flammability test chamber for testing materials in certain predetermined environments
[NASA-CASE-KSC-10126] c11 N71-24985
- Device for measuring thermoelectric properties of materials under high pressure
[NASA-CASE-WFO-11749] c14 N73-28486

MATERIALS TESTS

- Development of equipment for measuring thermal shock resistance of thin discs of material
[NASA-CASE-XLE-02024] c14 N71-22964
- Multisample test chamber for exposing materials to X rays, temperature change, and gaseous conditions and determination of material effects
[NASA-CASE-KMS-02930] c11 N71-23042
- Automated ball rebound resilience test equipment for determining viscoelastic properties of polymers
[NASA-CASE-XLA-08254] c14 N71-26161
- Hermetic sealing device for ends of tubular bodies during materials testing operations
[NASA-CASE-WFO-10431] c15 N71-29132
- Development of apparatus for testing burning rate and flammability of materials
[NASA-CASE-KMS-09690] c33 N72-25913
- Multiaxial vibration device for making vibration tests along orthogonal axes of test specimen
[NASA-CASE-HFS-20242] c14 N73-19421
- Material testing system with load sensor for applying and measuring cyclic tensile and compressive loads to test specimens
[NASA-CASE-HFS-20673] c14 N73-20476

MATHEMATICAL LOGIC

- Logical function and circuit generator
[NASA-CASE-XLA-05099] c09 N73-13209

MATRICES (CIRCUITS)

- Fabrication methods for matrices of solar cell submodules
[NASA-CASE-INP-05821] c03 N71-11056
- Magnetic matrix memory system for nondestructive reading of information contained in matrix
[NASA-CASE-INP-05835] c08 N71-12504
- Conductor for connecting parallel cells into submodules in series to form solar cell matrix
[NASA-CASE-WFO-10821] c03 N71-19545
- Reliable magnetic core circuit apparatus with application in selection matrices for digital memories
[NASA-CASE-INP-01318] c10 N71-23033
- Serial digital decoder design with square circuit matrix and serial memory storage units
[NASA-CASE-WFO-10150] c08 N71-24650
- Electrically connected matrix of discrete solar cell blanks
[NASA-CASE-WFO-10591] c03 N72-22041

MATS (SYSTEMS)

- Simulator for practicing the mating of an observer-controlled object with a target
[NASA-CASE-HFS-23052-2] c14 N77-18179

MCLEOD GAGES

- Automatic recording McLeod gage with three electrodes and solenoid valve connection
[NASA-CASE-XLE-03280] c14 N71-23093

MEASURING INSTRUMENTS

- Capacitance measuring device for determining flare accuracy on tapered tubes
[NASA-CASE-KMS-03495] c14 N69-39785
- Characteristics and performance of electrical system to determine angular rotation
[NASA-CASE-INP-00447] c14 N70-33179
- Two plane balance for simultaneous measurements of multiple forces
[NASA-CASE-XAC-00073] c14 N70-34813
- Parallel motion suspension device for measuring instruments
[NASA-CASE-INP-01567] c15 N70-41310
- Method and apparatus for measuring potentials in plasmas
[NASA-CASE-XLE-00821] c25 N71-15650
- Transducer for measuring deflections from vibrating structures
[NASA-CASE-XLA-03135] c32 N71-16428

- Gage for quality control of sealing surfaces of threaded boss
[NASA-CASE-INP-04966] c14 N71-17658
- Equipment for measuring partial water vapor pressure in gas tank
[NASA-CASE-KMS-01618] c14 N71-20741
- Gauge for measuring quantity of liquid in spherical tank in reduced gravity
[NASA-CASE-KMS-06236] c14 N71-21007
- Nonreusable energy absorbing device comprising ring member with plurality of recesses, cutting members, and guide member mounted in each recess
[NASA-CASE-INP-10040] c15 N71-22877
- Ablation sensor for measuring surface ablation rate of material on vehicles entering earths atmosphere on entry into planetary atmospheres
[NASA-CASE-XLA-01791] c14 N71-22991
- Test fixture for measuring moment of inertia of irregularly shaped body with multiple axes
[NASA-CASE-XGS-01023] c14 N71-22992
- Electron beam deflection devices for measuring electric fields
[NASA-CASE-INP-10289] c14 N71-23699
- Device for measuring two orthogonal components of force with gallium flotation of measuring target for use in vacuum environments
[NASA-CASE-XAC-04885] c14 N71-23790
- Gage for measuring internal angle of flare on end of tube
[NASA-CASE-INP-04415] c14 N71-24693
- Device utilizing RC rate generators for continuous slow speed measurement
[NASA-CASE-INP-02966] c10 N71-24863
- Solid state force measuring electromechanical transducers made of piezoresistive materials
[NASA-CASE-ERC-10088] c26 N71-25490
- Design and development of layout tool for machine shop use to locate point in precise reference to straight or bowed reference edge
[NASA-CASE-ERC-10005] c15 N71-26145
- Volume displacement transducer for leak detection in hermetically sealed semiconductor devices
[NASA-CASE-ERC-10033] c14 N71-26672
- Deformation measuring apparatus with feedback control for arbitrarily shaped structures
[NASA-CASE-LAR-10098] c32 N71-26681
- Foam insulation thickness measuring and injection device for spacecraft applications
[NASA-CASE-HFS-20261] c14 N71-27005
- Resonant infrasonic gauging device for measuring liquid quantity in closed bladderless reservoir
[NASA-CASE-MSC-11847-1] c14 N72-11363
- Measuring roll alignment of test body with respect to reference body
[NASA-CASE-GSC-10514-1] c14 N72-20379
- Sensor for detecting and measuring energy, velocity and direction of travel of a cosmic dust particle
[NASA-CASE-GSC-10503-1] c14 N72-20381
- Pumping and metering dual piston system and monitor for reaction chamber constituents
[NASA-CASE-GSC-10218-1] c15 N72-21465
- Capacitive tank gaging device for monitoring one constituent of two phase fluid by sensing dielectric constant
[NASA-CASE-HFS-21629] c14 N72-22442
- Development of mechanical device for measuring distance of point within sphere from surface of sphere
[NASA-CASE-XLA-06683] c14 N72-28436
- Surface based altitude measuring system for accurately measuring altitude of airborne vehicle
[NASA-CASE-ERC-10412-1] c09 N73-12211
- Instrument for measuring magnitude and direction of flow velocity in flow field
[NASA-CASE-LAR-10855-1] c14 N73-13415
- Multiaxial vibration device for making vibration tests along orthogonal axes of test specimen
[NASA-CASE-HFS-20242] c14 N73-19421
- Material testing system with load sensor for applying and measuring cyclic tensile and compressive loads to test specimens
[NASA-CASE-HFS-20673] c14 N73-20476
- Development of droplet monitoring probe for use in analysis of droplet propagation in mixed-phase fluid stream

SUBJECT INDEX

MECHANICAL DEVICES

[NASA-CASE-NFO-10985] c14 N73-20478
Device for measuring thermoelectric properties of materials under high pressure
[NASA-CASE-NFO-11749] c14 N73-28486
Radio frequency source resistance measuring instruments of varied design
[NASA-CASE-NFO-11291-1] c14 N73-30388
Absolute pressure measuring device for measuring gas density level in high vacuum range
[NASA-CASE-LAB-10000] c14 N73-30394
Thin film analyzer utilizing holographic techniques
[NASA-CASE-MFS-20823-1] c16 N73-30476
Three-axis adjustable loading structure
[NASA-CASE-FRC-10051-1] c35 N74-13129
Thin film gauge --- for measuring convective heat transfer rates along test surfaces in wind tunnels
[NASA-CASE-NFO-10617-1] c35 N74-22095
Apparatus and method for processing Korotkov sounds --- for blood pressure measurement
[NASA-CASE-MSC-13999-1] c52 N74-26626
Electric field measuring and display system --- for cloud formations
[NASA-CASE-KSC-10731-1] c33 N74-27862
Device for measuring tensile forces
[NASA-CASE-MSC-21728-1] c35 N74-27865
Measuring probe position recorder
[NASA-CASE-LAR-10806-1] c35 N74-32877
Meter for use in detecting tension in straps having predetermined elastic characteristics
[NASA-CASE-MFS-22189-1] c35 N75-19615
Thrust measurement
[NASA-CASE-XMS-05731] c35 N75-29382
Apparatus for measuring a sorbate dispersed in a fluid stream
[NASA-CASE-FRC-10896-1] c34 N75-32389
Surface roughness measuring system
[NASA-CASE-NFO-13862-1] c32 N77-17325
Method and apparatus for measuring web material wound on a reel
[NASA-CASE-GSC-11902-1] c38 N77-17495
Lightning current waveform measuring system
[NASA-CASE-KSC-11018-1] c33 N77-21320
Optical instrument employing reticle having preselected visual response pattern formed thereon
[NASA-CASE-ARC-10976-1] c74 N77-22950
Direct reading inductance meter
[NASA-CASE-NFO-13792-1] c35 N77-32455

MECHANICAL DEVICES

Mechanical coordinate converter for use with spacecraft tracking antennas
[NASA-CASE-XNP-00614] c14 N70-36907
Load cell protection device using spring-loaded breakaway mechanism
[NASA-CASE-XMS-06782] c32 N71-15974
Design and development of satellite despin device
[NASA-CASE-XNP-08523] c31 N71-20396
Development of two force component measuring device
[NASA-CASE-XAC-04886-1] c14 N71-20439
Design, development, and characteristics of latching mechanism for operation in limited access areas
[NASA-CASE-XMS-03745] c15 N71-21076
Design of mechanical device for stirring several test tubes simultaneously
[NASA-CASE-XAC-06956] c15 N71-21177
Design and development of random function tracer for obtaining coordinates of points on contour maps
[NASA-CASE-XLA-01401] c15 N71-21179
Design and characteristics of device for closing canisters under high vacuum conditions
[NASA-CASE-XLA-01446] c15 N71-21528
Development of non-magnetic indexing device for orienting magnetic flux sensing instrument in magnetic field without generation of detrimental magnetic fields
[NASA-CASE-XGS-02422] c15 N71-21529
Design and development of module joint clamping device for application to solar array construction
[NASA-CASE-XNP-02341] c15 N71-21531
Hand controller operable about three respectively perpendicular axes and capable of actuating signal generators for attitude control devices

[NASA-CASE-XMS-07487] c15 N71-23255
Metal alloy bearing materials for space applications
[NASA-CASE-XLE-05033] c15 N71-23810
Mechanical actuator wherein linear motion changes to rotational motion
[NASA-CASE-XGS-04548] c15 N71-24045
Design and characteristics of device for showing amount of cable payed out from winch and load imposed
[NASA-CASE-MSC-12052-1] c15 N71-24599
Design and development of release mechanism for spacecraft components, releasable despin weights, and extensible gravity booms
[NASA-CASE-XGS-08718] c15 N71-24600
Apparatus for mechanically dispersing ultrafine metal powders subjected to shock waves
[NASA-CASE-XLE-04946] c17 N71-24911
Self lubricating gears and other mechanical parts having surface adapted to frictional contact
[NASA-CASE-MFS-14971] c15 N71-24984
Design and development of layout tool for machine shop use to locate point in precise reference to straight or bowed reference edge
[NASA-CASE-FRC-10005] c15 N71-26145
Design and development of linear actuator based on bimetallic spring expansion
[NASA-CASE-NFO-10637] c15 N72-12409
Characteristics of lightweight actuator for imparting linear motion using elongated output shaft
[NASA-CASE-NFO-11222] c15 N72-25456
Development of mechanical device for measuring distance of point within sphere from surface of sphere
[NASA-CASE-XLA-06683] c14 N72-28436
Development of thermal compensating structure which maintains uniform length with changes in temperature
[NASA-CASE-MFS-20433] c15 N72-28496
Development of mating flat surfaces to inhibit leakage of fluid around shafts
[NASA-CASE-XLE-10326-2] c15 N72-29488
Development of solar energy powered heliotrope assembly to orient solar array toward sun
[NASA-CASE-GSC-10945-1] c21 N72-31637
Design and construction of mechanical probe for determining if object is properly secured
[NASA-CASE-MFS-20760] c14 N72-33377
Development and characteristics of rotary actuator for use on spacecraft to deploy and support pivotal structures such as solar panels
[NASA-CASE-NFO-10680] c31 N73-14855
Collapsible support for antenna reflector applied to installation of spacecraft antennas
[NASA-CASE-NFO-11751] c07 N73-24176
Pneumatic foot pedal operated fluidic exercising device
[NASA-CASE-MSC-11561-1] c05 N73-32014
Mechanical exposure interlock device for preventing film overexposure in oscilloscope camera
[NASA-CASE-LAR-10319-1] c14 N73-32322
Reefing system
[NASA-CASE-LAR-10129-2] c37 N74-20063
Sprag solenoid brake --- development and operations of electrically controlled brake
[NASA-CASE-MFS-21846-1] c37 N74-26976
Solid medium thermal engine
[NASA-CASE-ARC-10461-1] c44 N74-33379
Automatic inoculating apparatus --- includes movable carriage, drive motor, and swabbing motor
[NASA-CASE-LAR-11074-1] c51 N75-13502
Clock setter
[NASA-CASE-LAR-11458-1] c35 N76-16392
Apparatus for positioning modular components on a vertical or overhead surface
[NASA-CASE-LAR-11465-1] c37 N76-21554
An artificial leg employing a mechanical energy storage device for hip disarticulation
[NASA-CASE-ARC-10916-1] c54 N76-26871
Wrist joint assembly
[NASA-CASE-MFS-23311-1] c37 N76-28554
Automatic multiple-sample applicator and electrophoresis apparatus
[NASA-CASE-ARC-10991-1] c25 N77-12157

- Reel safety brake
[NASA-CASE-GSC-11960-1] c37 N77-14479
- Adjustable chamfering tool
[NASA-CASE-NFO-10857-1] c37 N77-22478
- Mechanical sequencer
[NASA-CASE-MSC-19536-1] c37 N77-22482
- Combined docking and grasping device
[NASA-CASE-MFS-23088-1] c37 N77-23483
- Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-2] c52 N77-27694
- MECHANICAL DRIVES**
- Hydraulic drive mechanism for leveling isolation platforms
[NASA-CASE-XMS-03252] c15 N71-10658
- Antibacklash circuit for hydraulic drive system
[NASA-CASE-XNP-01020] c03 N71-12260
- Precision stepping drive device using cam disk
[NASA-CASE-MFS-14772] c15 N71-17692
- Incremental motion drive system applied to interferometer components
[NASA-CASE-XNP-08897] c15 N71-17694
- Ratchet mechanism for high speed operation at reduced backlash
[NASA-CASE-MFS-12805] c15 N71-17805
- Development of apparatus for automatically changing carriage speed of welding machine to obtain constant speed of torch along work surface
[NASA-CASE-XMF-07069] c15 N71-23815
- Drive system for parabolic tracking antenna with reversible action and minimal backlash
[NASA-CASE-NFO-10173] c15 N71-24696
- Synchronous dc direct-drive system comprising multiple-loop hybrid control system controlling load directly connected to actuator
[NASA-CASE-GSC-10065-1] c10 N71-27136
- Energy absorption device in high precision gear train for protection against damage to components caused by stop loads
[NASA-CASE-XNP-01848] c15 N71-28959
- Automatic controlled drive mechanism for portable boring bar
[NASA-CASE-XLA-03661] c15 N71-33518
- Rotary actuator for use in environments with no rolling and sliding friction
[NASA-CASE-NFO-10244] c15 N72-26371
- Development and characteristics of rotary actuator for use on spacecraft to deploy and support pivotal structures such as solar panels
[NASA-CASE-NFO-10680] c31 N73-14855
- Optically actuated two position mechanical mover
[NASA-CASE-NFO-13105-1] c37 N74-21060
- Two speed drive system --- mechanical device for changing speed on rotating vehicle wheel
[NASA-CASE-MFS-20645-1] c37 N74-23070
- Concentric differential gearing arrangement
[NASA-CASE-ARC-10462-1] c37 N74-27901
- Geneva mechanism --- including star wheel and driver
[NASA-CASE-NFO-13281-1] c37 N75-13266
- Mechanical thermal motor
[NASA-CASE-MFS-23062-1] c37 N77-12402
- Mount for continuously orienting a collector dish in a system adapted to perform both diurnal and seasonal solar tracking
[NASA-CASE-MFS-23267-1] c35 N77-20401
- Hydraulic drain means for servo-systems
[NASA-CASE-NFO-10316-1] c37 N77-22479
- Mechanical sequencer
[NASA-CASE-MSC-19536-1] c37 N77-22482
- MECHANICAL ENGINEERING**
- Manual actuator --- for spacecraft exercising machines
[NASA-CASE-MFS-21481-1] c37 N74-18127
- Actuator mechanism
[NASA-CASE-GSC-11883-2] c37 N77-15400
- Apparatus for automatically spraying a coating material
[NASA-CASE-MFS-23506-2] c37 N77-20441
- Shaft seal assembly for high speed and high pressure applications
[NASA-CASE-LEW-11873-1] c37 N77-27404
- MECHANICAL MEASUREMENT**
- Air brake device for absorbing and measuring power from rotating shafts
[NASA-CASE-XLF-00720] c14 N70-40201
- Water cooled gage for strain measurements in high temperature environments
[NASA-CASE-XNP-09205] c14 N71-17657
- Development of apparatus for measuring successive increments of strain on elastomers
[NASA-CASE-XMF-04680] c15 N71-19489
- Development of Hall effect transducer for converting mechanical shaft rotations into proportional electrical signals
[NASA-CASE-LAR-10620-1] c09 N72-25255
- Strain gage mounting assembly
[NASA-CASE-NFO-13170-1] c35 N76-14430
- MECHANICAL PROPERTIES**
- Test apparatus for determining mechanical properties of refractory materials at high temperatures in vacuum or inert atmospheres
[NASA-CASE-XLE-00335] c14 N70-35368
- Electric resistance spot welding and brazing for producing metal bonds with superior mechanical and structural characteristics
[NASA-CASE-LAR-11072-1] c15 N73-20535
- MECHANICS (PHYSICS)**
- Hovering type flying vehicle design and principle mechanisms for manned or unmanned use
[NASA-CASE-MSC-12111-1] c02 N71-11039
- MECHANIZATION**
- Apparatus for automatically spraying a coating material
[NASA-CASE-MFS-23506-2] c37 N77-20441
- MEDICAL ELECTRONICS**
- Circuit for detecting initial systole and diastolic notch --- for monitoring arterial pressure
[NASA-CASE-LEW-11581-1] c54 N75-13531
- MEDICAL EQUIPMENT**
- Electromedical garment, applying vectorcardiologic type electrodes to human torsos for data recording during physical activity
[NASA-CASE-XFR-10856] c05 N71-11189
- Respiration analyzing method and apparatus for determining subjects oxygen consumption in aerospace environments
[NASA-CASE-XFR-08403] c05 N71-11202
- Laser machining device with dielectric functioning as beam waveguide for mechanical and medical applications
[NASA-CASE-BQH-10541-2] c15 N71-27135
- Zero power telemetry actuated switch for biomedical equipment
[NASA-CASE-ARC-10105] c09 N72-17153
- Tilting table for testing human body in variety of positions while exercising on ergometer or other biomedical devices
[NASA-CASE-MFS-21010-1] c05 N73-30078
- Automatic device for assaying urine on bacterial adenosine triphosphate content
[NASA-CASE-GSC-11169-2] c05 N73-32011
- Servo-controlled intravital microscope system
[NASA-CASE-NFO-13214-1] c35 N75-25123
- Heat sterilizable patient ventilator
[NASA-CASE-NFO-13313-1] c54 N75-27761
- Medical subject monitoring systems --- multichannel monitoring systems
[NASA-CASE-MSC-14180-1] c52 N76-14757
- Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-1] c54 N76-22914
- Readout electrode assembly for measuring biological impedance
[NASA-CASE-ARC-10816-1] c35 N76-24525
- A cervix-to-rectum measuring device in a radiation applicator for use in the treatment of cervical cancer
[NASA-CASE-GSC-12081-2] c52 N77-26796
- Corneal seal device
[NASA-CASE-LEW-12258-1] c52 N77-28716
- Snap-in compressible biomedical electrode
[NASA-CASE-MSC-14623-1] c52 N77-28717
- MEMBRANE STRUCTURES**
- Liquid junction for glass electrode or pH meters
[NASA-CASE-NFO-10682] c15 N70-34699
- Expulsion and measuring device for determining quantity of liquid in tank under conditions of weightlessness
[NASA-CASE-XMS-01546] c14 N70-40233
- Flexible composite membrane structure impervious to extremely reactive chemicals in rocket propellants
[NASA-CASE-XNP-08837] c18 N71-16210
- Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for

- spacecraft walls and pumping liquid propellants
[NASA-CASE-XNP-08881] c17 N71-28747
- Meteoroid capture cell construction
[NASA-CASE-MSC-12423-1] c91 N76-30131
- MEMBRANES**
- Apparatus for measuring polymer membrane expansion in electrochemical cells
[NASA-CASE-XGS-03865] c14 N69-21363
- Separation cell with permeable membranes for fluid mixture component separation
[NASA-CASE-XMS-02952] c18 N71-20742
- Water insoluble, cationic permselective membrane
[NASA-CASE-NFO-11091] c18 N72-22567
- A reverse osmosis membrane of high urea rejection properties
[NASA-CASE-ARC-10980-1] c27 N77-18265
- MEMORY**
- Method for making conductors for ferrite memory arrays --- from pre-formed metal conductors
[NASA-CASE-LAR-10994-1] c24 N75-13032
- MERCURY (METAL)**
- Interrupter switching device utilizing electrodes and mercury filled capillary tubes in which current flow vaporizes mercury as circuit breaker
[NASA-CASE-XNP-02251] c12 N71-20896
- Method of forming ceramic to metal seals impervious to gaseous and liquid mercury at high temperature
[NASA-CASE-XNP-01263-2] c15 N71-26312
- Development of system for delivering vaporized mercury to electron bombardment ion engine
[NASA-CASE-NFO-10737] c28 N72-11709
- MERCURY VAPOR**
- Interrupter switching device utilizing electrodes and mercury filled capillary tubes in which current flow vaporizes mercury as circuit breaker
[NASA-CASE-XNP-02251] c12 N71-20896
- Liquid-vapor interface seal design for turbine rotating shafts including helical and molecular pumps and liquid cooling of mercury vapor
[NASA-CASE-XNP-02862-1] c15 N71-26294
- METABOLIC WASTES**
- An improved cooling system for removing metabolic heat from an hermetically sealed spacesuit
[NASA-CASE-ARC-11059-1] c54 N77-14743
- METABOLISM**
- Automated analysis of oxidative metabolites
[NASA-CASE-ARC-10469-1] c25 N75-12086
- Process for control of cell division
[NASA-CASE-LAR-10773-3] c51 N77-25769
- METAL BONDING**
- Bonding method for improving contact between lead telluride thermoelectric elements and tungsten electrodes
[NASA-CASE-XGS-04554] c15 N69-39786
- Plasma spraying gun for forming diffusion bonded metal or ceramic coatings on substrates
[NASA-CASE-XLE-01604-2] c15 N71-15610
- Describing metal valve pintle with encapsulated elastomeric body
[NASA-CASE-MSC-12116-1] c15 N71-17648
- Apparatus for determining quality of bond between high density material and low density material
[NASA-CASE-MFS-13686] c15 N71-18132
- Metal soldering with hydrazine monoperfluoro alkanoate for corrosion resistant coatings
[NASA-CASE-XNP-03459] c15 N71-21078
- Leak resistant bonded elastomeric seal for secondary electrochemical cells
[NASA-CASE-XGS-02631] c03 N71-23006
- Metal pattern bonding technique for cover glass attachment to silicon solar cells for space applications
[NASA-CASE-XLE-06569] c03 N71-23449
- Development of electrical system for indicating optimum contact between electrode and metal surface to permit improved soldering operation
[NASA-CASE-KSC-10242] c15 N72-23497
- Development of process for bonding resinous body in cavities of honeycomb structures
[NASA-CASE-MSC-12357] c15 N73-12489
- Electric resistance spot welding and brazing for producing metal bonds with superior mechanical and structural characteristics
[NASA-CASE-LAR-11072-1] c15 N73-20535
- Totally confined explosive welding --- apparatus to reduce noise level and protect personnel during explosive bonding
[NASA-CASE-LAR-10941-1] c37 N74-21057
- Ultrasonically bonded valve assembly
[NASA-CASE-NFO-13360-1] c37 N75-25185
- Bimetallic junctions
[NASA-CASE-LEW-11573-1] c26 N77-28265
- METAL COATINGS**
- Joining aluminum to stainless steel by bonding aluminum coatings onto titanium coated stainless steel and brazing aluminum to aluminum/titanium coated steel
[NASA-CASE-MFS-07369] c15 N71-20443
- Metal soldering with hydrazine monoperfluoro alkanoate for corrosion resistant coatings
[NASA-CASE-XNP-03459] c15 N71-21078
- Low concentration alkaline solution treatment of aluminum with metal phosphate surface coatings to improve chemical bonding and reduce coating weight
[NASA-CASE-XLA-01995] c18 N71-23047
- Organometallic compounds of niobium and tantalum useful for film deposition
[NASA-CASE-XNP-04023] c06 N71-28808
- Silicide coating process and composition for protection of refractory metals from oxidation
[NASA-CASE-XLE-10910] c18 N71-29040
- Selective nickel deposition on irradiation sensitive compounds
[NASA-CASE-LEW-10965-1] c15 N72-25452
- Silicon carbide backward diode with coated lead attachment
[NASA-CASE-BRC-10224-2] c09 N73-27150
- Panel for selectively absorbing solar thermal energy and the method of producing said panel
[NASA-CASE-MFS-22562-1] c44 N76-14595
- Ultraviolet light reflective coating
[NASA-CASE-GSC-11786-1] c24 N76-24363
- Germanium coated microbridge and method
[NASA-CASE-MFS-23274-1] c76 N76-30084
- Solar cell collector and method for producing same --- indium alloy coatings
[NASA-CASE-LEW-12552-1] c44 N77-17564
- Metallic hot wire anemometer --- for high speed wind tunnel tests
[NASA-CASE-ARC-10911-1] c35 N77-20400
- METAL CUTTING**
- Metal shearing energy absorber
[NASA-CASE-HQN-10638-1] c15 N73-30460
- Vee-notching device --- with adjustable carriage
[NASA-CASE-MFS-20730-1] c39 N74-13131
- Hole cutter --- drill bits and rotating shaft
[NASA-CASE-MFS-22649-1] c37 N75-25186
- METAL FIBERS**
- Lightweight electrically powered flexible thermal laminate --- made of metal fibers
[NASA-CASE-MSC-12662-1] c24 N75-16635
- METAL FILMS**
- Means and methods of depositing thin films on substrates
[NASA-CASE-XNP-00595] c15 N70-34967
- Metallic film diffusion into metal or ceramic surfaces for boundary lubrication in aerospace environments
[NASA-CASE-XLE-01765] c18 N71-10772
- Bismuth and lead surface coatings for gas bearings in aerospace engineering
[NASA-CASE-XGS-02011] c15 N71-20739
- Metallic film diffusion for boundary lubrication in aerospace engineering
[NASA-CASE-XLE-10337] c15 N71-24046
- Magnetic recording head composed of ferrite core coated with thin film of aluminum-iron-silicon alloy
[NASA-CASE-GSC-10097-1] c08 N71-27210
- Thin absorbing metallic film for increased visible light transmission
[NASA-CASE-LAR-10836-1] c26 N72-27784
- Deposition of alloy films --- on irregularly shaped metal object
[NASA-CASE-LEW-11262-1] c27 N74-13270
- Multitarget sequential sputtering apparatus
[NASA-CASE-NFO-13345-1] c37 N75-19684
- Method of forming metal hydride films
[NASA-CASE-IPW-12083-1] c26 N76-18262
- Strong thin membrane structure
[NASA-CASE-NFO-14021-1] c27 N77-32313

METAL FINISHING

- Selective plating of etched circuits without removing previous plating
[NASA-CASE-XGS-03120] c15 N71-24047
- Surface finishing --- for aircraft wings
[NASA-CASE-MSC-12631-1] c24 N77-28225

METAL FOILS

- Characteristics of device for folding thin flexible sheets into compact configuration
[NASA-CASE-XLA-00137] c15 N70-33180
- Passive thermal control coating on aluminum foil laminate for inflatable spacecraft surfaces
[NASA-CASE-XLA-01291] c33 N70-36617
- Development and characteristics of thermal radiation shielding of refractory metal foil used for induction furnace
[NASA-CASE-XLE-03432] c33 N71-24145
- Method of making porous conductive supports for electrodes --- by electroforming and stacking nickel foils
[NASA-CASE-GSC-11367-1] c44 N74-19692
- Insulation foil and method of making
[NASA-CASE-LEW-11484-2] c24 N75-14839
- Method and apparatus for tensile testing of metal foil
[NASA-CASE-LAR-10208-1] c35 N76-18400

METAL FUELS

- Preparing oxidizer coated metal fuel particles
[NASA-CASE-NPO-11975-1] c28 N74-33209

METAL HALIDES

- Process for making anhydrous metal halides
[NASA-CASE-LEW-11860-1] c37 N76-18458
- Double discharge metal vapor laser with metal halide as a lasing
[NASA-CASE-NPO-13448-2] c36 N77-24469

METAL HYDRIDES

- Method of forming metal hydride films
[NASA-CASE-LEW-12083-1] c26 N76-18262

METAL IONS

- Chemical synthesis of thermally stable organometallic polymers with divalent metal ion and tetraphenylphosphonitrilic units
[NASA-CASE-HCN-10364] c06 N71-27363

METAL JOINTS

- Leakproof soft metal seal for use in very high vacuum systems operating at cryogenic temperatures
[NASA-CASE-XGS-02441] c15 N70-41629
- Non-floating universal joint
[NASA-CASE-MSC-19546-1] c37 N77-25536

METAL MATRIX COMPOSITES

- High strength reinforced metallic composites for applications over wide temperature range
[NASA-CASE-XLE-02428] c17 N70-33288
- Process for producing dispersion strengthened nickel with aluminum comprising metallic matrices embedded with oxides or other hyperfine compounds
[NASA-CASE-XLE-06969] c17 N71-24142
- Self lubricating gears and other mechanical parts having surface adapted to frictional contact
[NASA-CASE-MPS-14971] c15 N71-24984
- Development of procedure for improved distribution of refractory compounds and micro-constituents in refractory metal matrix
[NASA-CASE-XLE-03940-2] c17 N72-28536
- A heat exchanger and method of making
[NASA-CASE-LPW-12441-1] c34 N75-19580
- Method of preparing graphite reinforced aluminum composite
[NASA-CASE-MPS-21077-1] c24 N75-28135
- Method of making reinforced composite structure
[NASA-CASE-LEW-12619-1] c24 N77-19171

METAL OXIDE SEMICONDUCTORS

- Gyrator circuit using MOS field effect transistors
[NASA-CASE-MPS-21433] c09 N73-20232
- Radiation hardening of MOS devices by boron --- for stabilizing gate threshold potential of field effect device
[NASA-CASE-GSC-11425-1] c76 N74-20329
- Integrated P-channel MOS gyrator
[NASA-CASE-MPS-22343-1] c33 N74-34638
- Radiation hardening of MOS devices by boron --- for stabilizing gate threshold potential
[NASA-CASE-GSC-11425-2] c76 N75-25730
- Solar cell collector and method for producing same --- indium alloy coatings
[NASA-CASE-LEW-12552-1] c44 N77-17564

- Multilevel metallization method for fabricating a metal oxide semiconductor device
[NASA-CASE-MPS-23541-1] c33 N77-27308

METAL OXIDES

- Process for producing dispersion strengthened nickel with aluminum comprising metallic matrices embedded with oxides or other hyperfine compounds
[NASA-CASE-XLE-06969] c17 N71-24142
- Photofabrication techniques for selective removal of conductive metals oxide coatings from nonconductive substrates
[NASA-CASE-ERC-10108] c06 N72-21094
- Producing metal powders of controlled particle size by reducing oxide using reactive metal vapor in vacuum
[NASA-CASE-XLE-06461] c17 N72-22530
- Method for obtaining oxygen from lunar or similar soil
[NASA-CASE-MSC-12408-1] c46 N74-13011

METAL PARTICLES

- Magnetohydrodynamic generator for mixing nonconductive gas and liquid metal mist to form slugs
[NASA-CASE-XLE-02083] c03 N69-39983
- Cermet for nuclear fuel constructed by pressing metal coated ceramic particles in die at temperature to cause bonding of metal coatings, and tested for thermal stability
[NASA-CASE-LEW-10219-1] c18 N71-28729
- Preparing oxidizer coated metal fuel particles
[NASA-CASE-NPO-11975-1] c28 N74-33209

METAL PLATES

- Development of large area micrometeoroid impact detector panels
[NASA-CASE-XLA-05906] c31 N71-16221
- Tungsten-coated tungsten-uranium dioxide nuclear fuel plates
[NASA-CASE-XLE-00209] c22 N73-32528
- Strain arrestor plate for fused silica tile --- bonding of thermal insulation to metallic plates or structural parts
[NASA-CASE-MSC-14182-1] c27 N76-14264

METAL POWDER

- Production of refractory bodies with controlled porosity by pressing and heating mixtures of refractory and inert metal powders
[NASA-CASE-LEW-10393-1] c17 N71-15468
- Electrode sealing and insulation for fuel cells containing caustic liquid electrolytes using powdered plastic and metal
[NASA-CASE-XMS-01625] c15 N71-23022
- Apparatus for mechanically dispersing ultrafine metal powders subjected to shock waves
[NASA-CASE-XLE-04946] c17 N71-24911
- Method to produce high purity copper fluoride by heating copper hydroxyfluoride powder and subjecting to flowing fluorine gas
[NASA-CASE-LEW-10794-1] c06 N72-17093
- Producing metal powders of controlled particle size by reducing oxide using reactive metal vapor in vacuum
[NASA-CASE-XLE-06461] c17 N72-22530
- Development of apparatus for producing metal powder particles of controlled size
[NASA-CASE-XLE-06461-2] c17 N72-28535
- Metal plating process employing spraying of metallic powder/peening particle mixture
[NASA-CASE-GSC-11163-1] c15 N73-32360

METAL SHEETS

- Fatigue testing apparatus with light shield and infrared reflector for high temperature evaluation of loaded sheet samples
[NASA-CASE-XLA-01782] c14 N71-26136
- Method of making pressure tight seal for super alloy
[NASA-CASE-LAR-10170-1] c37 N74-11301
- Method of making an explosively welded scarf joint
[NASA-CASE-LAR-11211-1] c37 N75-12326
- Process for making sheets with parallel pores of uniform size
[NASA-CASE-GSC-10984-1] c37 N75-26371
- Apparatus for welding sheet material --- butt joints
[NASA-CASE-XMS-01330] c37 N75-27376

METAL SHELLS

- A heat exchanger and method of making
[NASA-CASE-LEW-12441-1] c34 N75-19580

METAL SPINNING

Apparatus and method for spin forming tubular elbows with high strength, uniform thickness, and close tolerances
[NASA-CASE-XNP-01083] c15 N71-22723

METAL STRIPS

Metal ribbon wrapped outer wall for regeneratively cooled combustion chamber
[NASA-CASE-XLE-00164] c15 N70-36411
Metal strip mounting arrangement for solar cell arrays on spacecraft
[NASA-CASE-XGS-01475] c03 N71-11058
Forming tubes from long thin flat metal strips
[NASA-CASE-XGS-04175] c15 N71-18579
High speed shutter --- electrically actuated ribbon loop for shuttering optical or fluid passageways
[NASA-CASE-ABC-10516-1] c70 N74-21300

METAL SURFACES

Condenser-separator for dehumidifying air utilizing sintered metal surface
[NASA-CASE-XLA-08645] c15 N69-21465
Nickel plating onto etched aluminum castings
[NASA-CASE-XNP-04148] c17 N71-24830
High thermal emittance black surface coatings and process for applying to metal and metal alloy surfaces used in radiative cooling of spacecraft
[NASA-CASE-XLA-06199] c15 N71-24875
Method for treating metal surfaces to prevent secondary electron transmission
[NASA-CASE-INP-09469] c24 N71-25555
Method of forming ceramic to metal seals impervious to gaseous and liquid mercury at high temperature
[NASA-CASE-XNP-01263-2] c15 N71-26312
Anodizing method for providing metal surfaces with temperature reducing coatings against flaws
[NASA-CASE-XLE-00035] c33 N71-29151
Thin film gauge --- for measuring convective heat transfer rates along test surfaces in wind tunnels
[NASA-CASE-WFO-10617-1] c35 N74-22095
Thermal barrier coating system
[NASA-CASE-LEW-12554-1] c24 N76-23359
Surface finishing --- of metal airfoils by adhesive bonding
[NASA-CASE-HSC-12631-2] c05 N77-31131

METAL VAPORS

Magnetohydrodynamic generator for mixing nonconductive gas and liquid metal mist to form slugs
[NASA-CASE-XLE-02083] c03 N69-39983
Apparatus for producing hydrocarbon slurry containing small particles of magnesium for use as jet aircraft fuel
[NASA-CASE-XLE-00010] c15 N70-33382
Inert gas metallic vapor laser
[NASA-CASE-WFO-13449-1] c36 N75-32441
Isotope separation using metallic vapor lasers
[NASA-CASE-WFO-13550-1] c36 N77-26477

METAL WORKING

Controlled arc spot welding method
[NASA-CASE-XNP-00392] c15 N70-34814
Method and apparatus for shaping and joining large diameter metal tubes using magnetomotive forces
[NASA-CASE-XNP-05114] c15 N71-17650
Description of protective device for providing safe operating conditions around work piece in machine or metal working tool
[NASA-CASE-XLE-01092] c15 N71-22797
Description of portable milling tool for milling tube or pipe ends to desired shape and thickness
[NASA-CASE-XNP-03511] c15 N71-22799
Development and characteristics of frusto-conical die nib for extrusion of refractory metals
[NASA-CASE-XLE-06773] c15 N71-23817
Portable magnetomotive hammer for metal working
[NASA-CASE-INP-03793] c15 N71-24833
Method and apparatus for portable high precision magnetomotive bulging, constricting, and joining of large diameter metal tubes
[NASA-CASE-XNP-05114-3] c15 N71-24865
Insert facing tool --- manually operated cutting tool for forming studs in honeycomb material
[NASA-CASE-NPS-21485-1] c37 N74-25968

Apparatus for forming dished ion thruster grids
[NASA-CASE-LEW-11694-2] c37 N76-14461
Method of producing complex aluminum alloy parts of high temper, and products thereof
[NASA-CASE-HSC-19693-1] c26 N76-29401

METAL-METAL BONDING

Joining aluminum to stainless steel by bonding aluminum coatings onto titanium coated stainless steel and brazing aluminum to aluminum/titanium coated steel
[NASA-CASE-NPS-07369] c15 N71-20443
Method for honeycomb panel bonding by thermosetting film adhesive with electrical heat means
[NASA-CASE-XNP-01402] c18 N71-21651
Capillary flow weld-bonding
[NASA-CASE-LAR-11726-1] c37 N76-27568

METALLOGRAPHY

Development of method for etching copper
[NASA-CASE-XGS-06306] c17 N71-16044

METALLOSILOXANE POLYMERS

Thiophenyl ether disiloxanes and trisiloxanes useful as lubricant fluids
[NASA-CASE-NPS-22411-1] c37 N74-21058

METALLURGY

Induction heating of metallurgical specimens to high temperatures in coil furnace
[NASA-CASE-XLE-04026] c14 N71-23267

METALS

Transpiration cooled turbine blade made from metallic or ceramic wires
[NASA-CASE-XLE-00020] c15 N70-33226
Self lubricating fluoride-metal composite materials for outer space applications
[NASA-CASE-XLE-08511] c18 N71-23710
Punch and die device for forming convolution series in thin gage metal hemispheres
[NASA-CASE-XNP-05297] c15 N71-23811
Device for bending metal ribbon or wire
[NASA-CASE-XLA-05966] c15 N72-12408
Metal plating process employing spraying of metallic powder/peening particle mixture
[NASA-CASE-GSC-11163-1] c15 N73-32360
Glass-to-metal seals comprising relatively high expansion metals
[NASA-CASE-LEW-10698-1] c37 N74-21063
Scanning nozzle plating system --- for etching or plating metals on substrates without masking
[NASA-CASE-WFO-11758-1] c31 N74-23065
Production of pure metals
[NASA-CASE-LEW-10906-1] c25 N74-30502
Thermocouple tape --- developed from thermoelectrically different metals
[NASA-CASE-LEW-11072-2] c35 N76-15434
Method of forming shrink-fit compression seal
[NASA-CASE-LAR-11563-1] c37 N77-23482
Method for fabricating solar cells having integral collector grids
[NASA-CASE-LEW-12819-1] c44 N77-24593

METEORITE COLLISIONS

Method of and device for determining the characteristics and flux distribution of micrometeorites --- scanning puncture holes in sheet material with photoelectric cell
[NASA-CASE-WFO-12127-1] c91 N74-13130

METEORITES

Method for making pressurized meteoroid penetration detector panels
[NASA-CASE-XLA-08916] c15 N71-29018

METEORITIC DAMAGE

Capacitor sandwich structure containing metal sheets of known thickness for counting penetration rates of meteoroids
[NASA-CASE-XLE-01246] c14 N71-10797

METEOROID HAZARDS

Meteoroid impact position locator aid for manned space station
[NASA-CASE-LAR-10629-1] c35 N75-33367

METEOROID PROTECTION

Development and characteristics of protective coatings for spacecraft
[NASA-CASE-INP-02507] c31 N71-17679
Development of composite structures for spacecraft to serve as anti-meteoroid device
[NASA-CASE-LAR-10788-1] c31 N73-20880

METEOROIDS

Cameras for photographing meteors in selected sky area
[NASA-CASE-LAR-10226-1] c14 N73-19419

- Meteoroid capture cell construction
[NASA-CASE-MSC-12423-1] c91 N76-30131
- METROLOGICAL BALLOONS**
Aerodynamically stable meteorological balloon
using surface roughness effect
[NASA-CASE-MXP-04163] c02 N71-23007
- METHANE**
High temperature gas lubricant consisting of two
fluoro-bromo-methanes
[NASA-CASE-XLE-00353] c18 N70-39897
- MICHELSON INTERFEROMETERS**
Michelson interferometer with photodetector for
optical direction sensing
[NASA-CASE-NPO-10320] c14 N71-17655
Servo system for retroreflector of Michelson
interferometer
[NASA-CASE-NFO-10300] c14 N71-17662
Computerized optical system for producing
multiple images of a scene simultaneously
[NASA-CASE-MSC-12404-1] c23 N73-13661
Interferometer mirror tilt correcting system
[NASA-CASE-NPO-13687-1] c35 N76-14433
- MICROBALANCES**
Null-type vacuum microbalance for measuring
minute mechanical displacements
[NASA-CASE-XAC-00472] c15 N70-40180
- MICROBIOLOGY**
Development of variable angle device for
positioning test tubes to permit optimum
drying of culture medium
[NASA-CASE-LAR-10507-1] c11 N72-25284
Apparatus for microbiological sampling ---
including automatic swabbing
[NASA-CASE-LAR-11069-1] c35 N75-12272
Automatic inoculating apparatus --- includes
movable carriage, drive motor, and swabbing
motor
[NASA-CASE-LAR-11074-1] c51 N75-13502
Automatic microbial transfer device
[NASA-CASE-LAR-11354-1] c35 N75-27330
Application of luciferase assay for ATP to
antimicrobial drug susceptibility
[NASA-CASE-GSC-12039-1] c51 N77-22794
- MICROELECTRONICS**
Separation of semiconductor wafer into chips
bounded by scribe lines
[NASA-CASE-ERC-10138] c26 N71-14354
Vibrophonocardiograph comprising low weight and
small volume piezoelectric microphone with
amplifier having high input impedance for high
sensitivity and low frequency response
[NASA-CASE-XPR-07172] c05 N71-27234
Electrical connections for thin film hybrid
microcircuits
[NASA-CASE-XMS-02182] c10 N71-28783
Method for coating through-holes in ceramic
substrates used in fabricating miniaturized
electronic circuits
[NASA-CASE-MXP-05999] c15 N71-29032
Precision surface cutter for screen circuit
negatives and other microcircuits
[NASA-CASE-XLA-09843] c15 N72-27485
Material compositions and processes for
developing dielectric thick films used in
microcircuit capacitors
[NASA-CASE-LAR-10294-1] c26 N72-28762
Active tuned circuits for microelectronic
construction
[NASA-CASE-GSC-11340-1] c10 N72-33230
Germanium coated microbridge and method
[NASA-CASE-MFS-23274-1] c76 N76-30084
- MICROFILMS**
Apparatus for semiautomatic inspection of
microfilmed documents for density, resolution,
size, and position
[NASA-CASE-MFS-20240] c14 N71-26788
- MICROMETEORITES**
Method of and device for determining the
characteristics and flux distribution of
micrometeorites --- scanning puncture holes in
sheet material with photoelectric cell
[NASA-CASE-NFO-12127-1] c91 N74-13130
Micrometeoroid velocity and trajectory analyzer
[NASA-CASE-GSC-11892-1] c35 N76-15433
- MICROMETEORIDS**
Particle detector for measuring micrometeoroid
velocity in space
[NASA-CASE-XIA-00495] c14 N70-41332
- Piezoelectric transducer for detecting and
measuring micrometeoroids
[NASA-CASE-XAC-01101] c14 N70-41957
Pressurized cell micrometeoroid detector
[NASA-CASE-XLA-00936] c14 N71-14996
Development of large area micrometeoroid impact
detector panels
[NASA-CASE-XLA-05906] c31 N71-16221
Rotary bead dropper and selector for testing
micrometeorite transducers
[NASA-CASE-IGS-03304] c09 N71-22988
Measuring micrometeoroid depth of penetration
into various materials
[NASA-CASE-XLA-00941] c14 N71-23240
Structure of fabric layers for micrometeoroid
protection garment with capability for
eliminating heat shorts for use in
manufacturing space suits
[NASA-CASE-MSC-12109] c18 N71-26285
Micrometeoroid analyzer using arrays of
interconnected capacitors and ion detector
[NASA-CASE-ARC-10443-1] c14 N73-20477
Cold cathode discharge tube with pressurized gas
cell for meteoroid detection in space
[NASA-CASE-LAR-10483-1] c14 N73-32327
Deployable pressurized cell structure for a
micrometeoroid detector
[NASA-CASE-LAR-10295-1] c35 N74-21062
Semiconductor projectile impact detector
[NASA-CASE-MFS-23008-1] c35 N76-19405
- MICROMINIATURIZATION**
Miniaturized radiometer for detecting low level
thermal radiation
[NASA-CASE-XLA-04556] c14 N69-27484
- MICROORGANISMS**
Development of bacteriostatic conformal coating
and methods of application
[NASA-CASE-GSC-10007] c18 N71-16046
Portable vacuum probe surface sampler for
sampling large surface areas with relatively
light loading densities of microorganisms
[NASA-CASE-LAR-10623-1] c14 N73-30395
Measurement of gas production of microorganisms
--- using pressure sensors
[NASA-CASE-LAR-11326-1] c35 N75-33368
Determination of antimicrobial susceptibilities
of infected urines without isolation
[NASA-CASE-GSC-12046-1] c52 N77-26797
- MICROPARTICLES**
Micropacked column for rapid chromatographic
analysis using low gas flow rates
[NASA-CASE-MXP-04816] c06 N69-39936
- MICROPHONES**
Audio signal processing system for noise surge
elimination at low amplitude audio input
[NASA-CASE-MSC-12223-1] c07 N71-26181
Vibrophonocardiograph comprising low weight and
small volume piezoelectric microphone with
amplifier having high input impedance for high
sensitivity and low frequency response
[NASA-CASE-XPR-07172] c05 N71-27234
Development of wind tunnel microphone structure
to minimize effects of vibrations and
eliminate unwanted signals in microphone output
[NASA-CASE-MXP-00250] c11 N71-28779
Adjustable frequency response microphone
[NASA-CASE-LAR-11170-1] c32 N74-12843
- MICROPROCESSORS**
Microcomputerized electric field meter
diagnostic and calibration system
[NASA-CASE-KSC-11035-1] c33 N77-20343
- MICROSCOPES**
Absolute focus locking device for microscopes to
maintain set focus for extended time period
[NASA-CASE-LAR-10184] c14 N72-22445
Hand-held, lightweight, portable photomicroscope
[NASA-CASE-ARC-10468-1] c14 N73-33361
- MICROSTRIP TRANSMISSION LINES**
Thin conformal antenna array for microwave power
conversion
[NASA-CASE-NFO-13886-1] c32 N77-11269
- MICROSTRUCTURE**
Production of high strength refractory compounds
and microconstituents into refractory metal
matrix
[NASA-CASE-XLE-03940] c18 N71-26153
Development of procedure for improved
distribution of refractory compounds and
micro-constituents in refractory metal matrix

- [NASA-CASE-XLE-03940-2] c17 N72-28536
Diffusion welding --- heat treatment of nickel alloys following single step vacuum welding process
- [NASA-CASE-LEW-11388-2] c37 N74-21055
Method of determining band quality of power transistors attached to substrates --- X ray inspection of junction microstructure
- [NASA-CASE-MFS-21931-1] c37 N75-26372
MICROTHRUST
Electrostatic microthrust propulsion system with annular slit colloid thruster
- [NASA-CASE-GSC-10709-1] c28 N71-25213
Heated porous plug microthruster for spacecraft reaction jet controlled systems such as fuel flow regulation, propellant disassociation, and heat transfer augmentation
- [NASA-CASE-GSC-10640-1] c28 N72-18766
MICROWAVE AMPLIFIERS
Thermally sensitive tuning probe for nullifying detuning effects in microwave cavity resonator of amplifier
- [NASA-CASE-INP-00449] c14 N70-35220
MICROWAVE ANTENNAS
Microwave power receiving antenna solving heat dissipation problems by construction of elements as heat pipe devices
- [NASA-CASE-MFS-20333] c09 N71-13486
Development and characteristics of low-noise multimode monopulse antenna feed system for use with microwave communication equipment
- [NASA-CASE-INP-01735] c07 N71-22750
Microwave caindirectional antenna for use on spacecraft
- [NASA-CASE-XLA-03114] c09 N71-22888
Portable equipment for validating C band launch pad antennas and transmission lines used for spacecraft checkout
- [NASA-CASE-XKS-10543] c07 N71-26292
Multipurpose microwave antenna, employing dish reflector with plural coaxial horn feeds
- [NASA-CASE-NPO-11264] c07 N72-25174
Omnidirectional antenna array with circumferential slots for mounting on cylindrical space vehicle
- [NASA-CASE-LAR-10163-1] c09 N72-25247
Characteristics of microwave antenna with conical reflectors to generate plane wave front
- [NASA-CASE-NPO-11661] c07 N73-14130
Thin conformal antenna array for microwave power conversion
- [NASA-CASE-NPO-13886-1] c32 N77-11269
Dual frequency circularly polarized microwave integrated antenna
- [NASA-CASE-MSC-16100-1] c32 N77-15233
MICROWAVE CIRCUITS
Quasi-optical microwave circuit with dielectric body for use with oversize waveguides
- [NASA-CASE-ERC-10011] c07 N71-29065
MICROWAVE COUPLING
Microwave waveguide switch with rotor position control
- [NASA-CASE-INP-06507] c09 N71-23548
MICROWAVE EQUIPMENT
Apparatus for generating microwave signals at progressively related phase angles for driving antenna array
- [NASA-CASE-ERC-10046] c10 N71-18722
Broadband microwave waveguide window to compensate dielectric material filling
- [NASA-CASE-INP-08880] c09 N71-24808
Dual frequency feed systems for Cassegrainian antennas
- [NASA-CASE-NPO-13091-1] c09 N73-12214
Resonant waveguide stark cell --- using microwave spectrometers
- [NASA-CASE-LAR-11352-1] c33 N75-26245
Refrigerated coaxial coupling --- for microwave equipment
- [NASA-CASE-NPO-13504-1] c33 N75-30430
MICROWAVE FILTERS
Microwave power divider for providing variable output power to output waveguide in fixed waveguide system
- [NASA-CASE-NPO-11031] c07 N71-33606
Selective bandpass resonators using bandstop resonator pairs for microwave frequency operation
- [NASA-CASE-GSC-10990-1] c09 N73-26195
MICROWAVE FREQUENCIES
Varactor microwave frequency mixing circuit
- [NASA-CASE-IGS-02171] c09 N69-24324
Voltage tunable Gunn effect semiconductor for microwave generation
- [NASA-CASE-XER-07894] c09 N71-18721
Multimode antenna feed system for microwave and broadband communication
- [NASA-CASE-GSC-11046-1] c07 N73-28013
MICROWAVE OSCILLATORS
Microwave generator using Gunn effect for magnetic tuning
- [NASA-CASE-NPO-12106] c09 N73-15235
Electron beam controller --- using magnetic field to refocus spent electron beam in microwave oscillator tube
- [NASA-CASE-LEW-11617-1] c33 N74-10195
MICROWAVE RADIOMETERS
Input radio frequency circuit for switching type absolute temperature measuring radiometer for noise sources
- [NASA-CASE-ERC-11020] c14 N71-26774
MICROWAVE REFLECTOMETERS
Reflectometer for receiver input impedance match measurement
- [NASA-CASE-INP-10843] c07 N71-11267
Surface defect detection by reflected microwave radiation pattern
- [NASA-CASE-ARC-10009-1] c15 N71-17822
MICROWAVE RESONANCE
Microwave double resonance spectroscopy absorption cell for gas analysis
- [NASA-CASE-LAR-10305] c14 N71-26137
MICROWAVE SENSORS
Remote sensing of vegetation and soil using microwave ellipsometry
- [NASA-CASE-GSC-11976-1] c43 N76-23671
MICROWAVE SWITCHING
Design of gyrator circuit using operational amplifiers to replace ungrounded inductors
- [NASA-CASE-XAC-10608-1] c09 N71-12517
MICROWAVE TUBES
Electrostatic charged particle collector containing stacked electrodes for microwave tube
- [NASA-CASE-LEW-11192-1] c09 N73-13208
MICROWAVES
Radio frequency noise generator having microwave slow-wave structure in gas discharge plasma
- [NASA-CASE-XER-11019] c09 N71-23598
Method and apparatus for optically modulating light or microwave beam
- [NASA-CASE-GSC-10216-1] c23 N71-26722
Microwave waveguide mixer
- [NASA-CASE-ERC-10179] c07 N72-20141
Microwave power transmission system wherein level of transmitted power is controlled by reflections from receiver
- [NASA-CASE-MFS-21470-1] c44 N74-19870
RF beam center location method and apparatus for power transmission system
- [NASA-CASE-NPO-13821-1] c44 N76-26692
Wide power range microwave feedback controller
- [NASA-CASE-GSC-12146-1] c33 N77-21322
MIDAIR COLLISIONS
Economical satellite aided vehicle avoidance system for preventing midair collisions
- [NASA-CASE-ERC-10419] c21 N72-21631
Development and characteristics of electronic signalling system and data processing equipment for warning systems to avoid midair collisions between aircraft
- [NASA-CASE-LAR-10717-1] c21 N73-30641
MILLIMETER WAVES
Millimeter wave antenna system for spacecraft use
- [NASA-CASE-GSC-10949-1] c07 N71-28965
Millimeter wave pumped parametric amplifier
- [NASA-CASE-GSC-11617-1] c33 N74-32660
MILLING (MACHINING)
Rotary spindle lathe attachments for machining geometrical cones
- [NASA-CASE-IHS-04292] c15 N71-22722
MILLING MACHINES
Electro-optical system for maintaining two-axis alignment during milling operations on large tank-sections
- [NASA-CASE-INP-00908] c14 N70-40238
Description of portable milling tool for milling tube or pipe ends to desired shape and thickness
- [NASA-CASE-INP-03511] c15 N71-22799

- Grinding arrangement for ball nose milling cutters
[NASA-CASE-LAR-10450-1] c37 N74-27905
- MINERAL METABOLISM**
- Method and system for in vivo measurement of bone tissue using a two level energy source
[NASA-CASE-MSC-14276-1] c52 N77-14737
- MINIATURE ELECTRONIC EQUIPMENT**
- Miniature solid state, direction sensitive, stress transducer design with bonded semiconductive piezoresistive element for sensing residual stresses
[NASA-CASE-XNP-02983] c14 N71-21091
- Transducer circuit design with single coaxial cable for input and output connections including incorporation into miniaturized catheter transducer
[NASA-CASE-ARC-10132-1] c09 N71-24597
- Solid state television camera system consisting of monolithic semiconductor mosaic sensor and molecular digital readout systems
[NASA-CASE-XNP-06092] c07 N71-24612
- Miniature ingestible telemeter devices to measure deep-body temperature
[NASA-CASE-ARC-10583-1] c52 N76-29894
- Miniature biaxial strain transducer
[NASA-CASE-LAR-11648-1] c35 N77-14407
- MINIATURIZATION**
- Miniature vibration isolator utilizing elastic tubing material
[NASA-CASE-XLA-01019] c15 N70-40156
- Computer circuit performing both counting and shifting logic operations also capable of miniaturization and integration in basic circuits
[NASA-CASE-XNP-01753] c08 N71-22897
- Fast response miniature carbon dioxide detector with no moving parts for measuring concentration in any atmosphere
[NASA-CASE-MSC-13332-1] c14 N72-21408
- MIRRORS**
- Pneumatic control of telescopic mirror support system
[NASA-CASE-XLA-03271] c11 N69-24321
- Oscillatory electromagnetic mirror drive system for horizon scanners
[NASA-CASE-XLA-03724] c14 N69-27461
- Servo system for retroreflector of Michelson interferometer
[NASA-CASE-NPO-10300] c14 N71-17662
- Gas laser frequency stabilized by position of mirrors in resonant cavity
[NASA-CASE-XGS-03644] c16 N71-18614
- Highly stable optical mirror assembly optimizing image quality of light diffraction patterns
[NASA-CASE-ERC-10001] c23 N71-24868
- Adjustable rigid mount for trihedral mirror formed of alloy with small coefficient of thermal expansion supporting screws and spring-biased plates
[NASA-CASE-XNP-08907] c23 N71-29123
- Optical range finder using reflective first surfaces mirror and transmitting beam splitter
[NASA-CASE-MSC-12105-1] c14 N72-21409
- Optical mirror support system
[NASA-CASE-XER-07896-2] c23 N72-22673
- Strain gauge ambiguity sensor for segmented mirror active optical system
[NASA-CASE-MFS-20506-1] c35 N75-12273
- Interferometer mirror tilt correcting system
[NASA-CASE-NPO-13687-1] c35 N76-14433
- Method for manufacturing mirrors in zero gravity environment
[NASA-CASE-MSC-12611-1] c12 N76-15189
- Method and means for testing a glancing-incidence mirror system --- for X-ray telescopes
[NASA-CASE-MFS-22409-2] c74 N76-26988
- Three-mirror telescope
[NASA-CASE-MFS-23675-1] c74 N77-28937
- MISSILE CONTROL**
- Turnstile slot antenna
[NASA-CASE-GSC-11428-1] c32 N74-20864
- MISSILE LAUNCHERS**
- Launch pad missile release system with bending moment change rate reduction in thrust distribution structure at liftoff
[NASA-CASE-XNP-03198] c30 N70-40353
- Optical monitor panel consisting of translucent screen with test or meter information projected onto it from rear for application in control rooms of missile launching and tracking stations
[NASA-CASE-XKS-03509] c14 N71-23175
- Controlled release device for use in launching rockets or missiles
[NASA-CASE-XKS-03338] c15 N71-24043
- MITOSIS**
- Process for control of cell division
[NASA-CASE-LAR-10773-3] c51 N77-25769
- MIXING CIRCUITS**
- Varactor microwave frequency mixing circuit
[NASA-CASE-IGS-02171] c09 N69-24324
- Microwave waveguide mixer
[NASA-CASE-ERC-10179] c07 N72-20141
- MOBILITY**
- Traveling wave solid state amplifier utilizing a semiconductor with negative differential mobility
[NASA-CASE-HQN-10069] c33 N75-27251
- MODE TRANSFORMERS**
- Silicon controlled rectifier inverter with compensation of transients to avoid false gating
[NASA-CASE-XLA-08507] c09 N69-39984
- Dual waveguide mode source for controlling amplitudes of two modes
[NASA-CASE-XNP-03134] c07 N71-10676
- Direct current transformer
[NASA-CASE-MFS-23659-1] c33 N77-20341
- MODEMS**
- Charge storage diode modulators and demodulators
[NASA-CASE-NFO-10189-1] c33 N77-21314
- MODULATION**
- Demodulator for carrier transducers
[NASA-CASE-MUC-10107-1] c33 N74-17930
- MODULATORS**
- Fabry-Perot interferometer retrodirective reflector modulator for optical communication
[NASA-CASE-IGS-04480] c16 N69-27491
- Optical retrodirective modulator with focus spooling reflector driven by modulation signal
[NASA-CASE-GSC-10062] c14 N71-15605
- Calibrator for measuring and modulating or demodulating laser outputs
[NASA-CASE-XLA-03410] c16 N71-25914
- Full wave modulator-demodulator amplifier apparatus --- for generating rectified output signal
[NASA-CASE-PRC-10072-1] c33 N74-14939
- Charge storage diode modulators and demodulators
[NASA-CASE-NFO-10189-1] c33 N77-21314
- MODULES**
- Biorthogonal encoder with modular design
[NASA-CASE-NPO-10629] c08 N72-18184
- MOISTURE**
- Gas purged dry box glove reducing permeation of air or moisture into dry box or isolator by diffusion through glove
[NASA-CASE-XLE-02531] c05 N71-23080
- MOISTURE CONTENT**
- Remote sensing of vegetation and soil using microwave ellipsometry
[NASA-CASE-GSC-11976-1] c43 N76-23671
- MOISTURE BARRIERS**
- Method of evaluating moisture barrier properties of materials used in electronics encapsulation
[NASA-CASE-NPO-10051] c18 N71-24934
- MOLDING MATERIALS**
- Vacuum method for molding thermosetting compounds used as ablative materials
[NASA-CASE-XLA-01091] c15 N71-10672
- Method of making molded electric connector for use with flat conductor cables
[NASA-CASE-XNP-03498] c15 N71-15986
- Hydraulic apparatus for casting and molding of liquid polymers
[NASA-CASE-XNP-07659] c06 N71-22975
- Cold metal hydroforming techniques using epoxy molds for counteracting creep or stretch
[NASA-CASE-XLE-05641-1] c15 N71-26346
- Holding process for imidazopyrrolone polymers
[NASA-CASE-LAR-10547-1] c31 N74-13177
- Evacuated displacement compression molding
[NASA-CASE-LAR-10782-1] c31 N74-14133
- MOLDS**
- Forming mold for polishing and machining curved solar magnesium reflector with reinforcing ribs
[NASA-CASE-XLE-08917-2] c15 N71-24836

- Using molds for fabricating individual fluid circuit components
[NASA-CASE-XLA-07829] c15 N72-16329
- Evacuated displacement compression molding
[NASA-CASE-LAR-10782-1] c31 N74-14133
- Molding apparatus --- for thermosetting plastic compositions
[NASA-CASE-LAR-10489-2] c31 N74-32920
- Evacuated, displacement compression mold --- of tubular bodies from thermosetting plastics
[NASA-CASE-LAR-10782-2] c31 N75-13111
- Method of making an apertured casting --- using duplicate mold
[NASA-CASE-LEW-11169-1] c37 N76-23570
- MOLECULAR BEAMS**
Selector mechanism for mechanical separation and discrimination of high velocity molecular particles
[NASA-CASE-XLE-01533] c11 N71-10777
- Sputtering holes with ion beamlets
[NASA-CASE-LEW-11646-1] c20 N74-31269
- MOLECULAR GASES**
Compact hydrogenator
[NASA-CASE-NFO-11682-1] c35 N74-15127
- MOLECULAR OSCILLATORS**
Stabilization of He2(a-3 Sigma(+)) molecules in liquid helium by optical pumping for vacuum UV laser
[NASA-CASE-NFO-13993-1] c36 N77-24468
- MOLECULAR PUMPS**
Omnidirectional anisotropic molecular trap, used with vacuum pump to simulate space environments for testing spacecraft components
[NASA-CASE-XGS-00783] c30 N71-17788
- Liquid-vapor interface seal design for turbine rotating shafts including helical and molecular pumps and liquid cooling of mercury vapor
[NASA-CASE-XNP-02862-1] c15 N71-26294
- MOLECULAR ROTATION**
Diatomic infrared gasdynamic laser --- for producing different wavelengths
[NASA-CASE-ARC-01370-1] c36 N75-31426
- MOLECULAR SPECTROSCOPY**
Microwave double resonance spectroscopy absorption cell for gas analysis
[NASA-CASE-LAR-10305] c14 N71-26137
- MOLTEN SALT ELECTROLYTES**
Operation method for combined electrolysis device and fuel cell using molten salt to produce power by thermoelectric regeneration mechanism
[NASA-CASE-XLE-01645] c03 N71-20904
- Zinc-halide battery with molten electrolyte
[NASA-CASE-NFO-11961-1] c44 N76-18643
- MOLYBDENUM CARBIDES**
Flame or plasma spraying for molybdenum coating of carbon or graphite surfaces to prevent oxidative corrosion
[NASA-CASE-XLA-00302] c15 N71-16077
- MOLYBDENUM COMPOUNDS**
Method for producing refractory molybdenum disilicides
[NASA-CASE-XMS-00370] c17 N71-20941
- MOMENTS OF INERTIA**
Test fixture for measuring moment of inertia of irregularly shaped body with multiple axes
[NASA-CASE-XGS-01023] c14 N71-22992
- MOMENTUM**
Utilization of momentum devices for forming attitude control and damping system for spacecraft
[NASA-CASE-XLA-02551] c21 N71-21708
- Momentum-velocity analyzer for measuring minute space particles
[NASA-CASE-XMS-04201] c14 N71-22990
- MONITORS**
Fluid leakage detection system with automatic monitoring capability
[NASA-CASE-LAR-10323-1] c12 N71-17573
- Monitoring circuit design for sampling circuit control and reduction of time-bandwidth in video communication systems
[NASA-CASE-XNP-02791] c07 N71-23026
- Optical monitor panel consisting of translucent screen with test or meter information projected onto it from rear for application in control rooms of missile launching and tracking stations
[NASA-CASE-XKS-03509] c14 N71-23175
- Peak polarity selector for monitoring waveforms
[NASA-CASE-FEC-10010] c10 N71-24862
- Circuit for monitoring power supply by ripple current indication
[NASA-CASE-KSC-10162] c09 N72-11225
- Development of droplet monitoring probe for use in analysis of droplet propagation in mixed-phase fluid stream
[NASA-CASE-NFO-10985] c14 N73-20478
- Monitoring and recording lightning strokes in predetermined area
[NASA-CASE-KSC-10728-1] c14 N73-32319
- Method and apparatus for optically monitoring the angular position of a rotating mirror
[NASA-CASE-GSC-11353-1] c74 N74-21304
- Remote lightning monitor system
[NASA-CASE-KSC-11031-1] c33 N77-21319
- Cable fault locator
[NASA-CASE-KSC-10899-1] c33 N77-28394
- MONOCHROMATIC RADIATION**
Apparatus for producing monochromatic light from continuous plasma source
[NASA-CASE-XNP-04167-2] c25 N72-24753
- Laser extensometer
[NASA-CASE-NFS-19259-1] c36 N77-10516
- MONOCHROMATORS**
Analytical photoionization mass spectrometer with argon gas filter between light source and monochromator
[NASA-CASE-LAR-10180-1] c06 N71-13461
- Color television system for allowing monochrome television camera to produce color pictures
[NASA-CASE-MSC-12146-1] c07 N72-17109
- MONOPOLE ANTENNAS**
Monopole antenna system for maximum omnidirectional efficiency for use on satellites
[NASA-CASE-XLA-00414] c07 N70-38200
- Flexible monopole antenna with broad bandwidth and low voltage standing wave ratio
[NASA-CASE-MSC-12101] c09 N71-18720
- MONOPROPELLANTS**
Ignition system for monopropellant combustion devices
[NASA-CASE-XNP-00249] c28 N70-38249
- Catalyst bed ignition system for hydrazine propellants
[NASA-CASE-XNP-00876] c28 N70-41311
- Low thrust monopropellant engine
[NASA-CASE-GSC-12194-1] c20 N77-28219
- MONOPULSE ANTENNAS**
Electronic and mechanical scanning control system for monopulse tracking antenna
[NASA-CASE-XGS-05582] c07 N69-27460
- Development and characteristics of low-noise multimode monopulse antenna feed system for use with microwave communication equipment
[NASA-CASE-XNP-01735] c07 N71-22750
- Monopulse scanning network for scanning volumetric antenna pattern
[NASA-CASE-GSC-10299-1] c09 N71-24804
- Switchable beamwidth monopulse method and system
[NASA-CASE-GSC-11924-1] c33 N76-27472
- MONOPULSE RADAR**
Polarization diversity monopulse tracking receiver design without radio frequency switches
[NASA-CASE-XGS-03501] c09 N71-20864
- Monopulse tracking system with antenna array of three radiators for deriving azimuth and elevation indications
[NASA-CASE-XGS-01155] c10 N71-21483
- MONOSTABLE MULTIVIBRATORS**
Development and characteristics of resettable monostable pulse generator with charge rundown-timing circuit
[NASA-CASE-GSC-11139] c09 N71-27016
- Monostable multivibrator for producing output pulse widths with positive feedback NOR gates
[NASA-CASE-MSC-13492-1] c10 N71-28860
- MOSSBAUER EFFECT**
Mossbauer spectrometer radiation detector
[NASA-CASE-LAR-11155-1] c35 N74-15091
- Method and apparatus for vibration analysis utilizing the Mossbauer effect
[NASA-CASE-XNP-05882] c35 N75-27329
- MOTION**
Quick attach mechanism for moving or stationary wires, ropes, or cables
[NASA-CASE-XFP-05421] c15 N71-22994

MOTION PERCEPTION

A condition sensor system and method
[NASA-CASE-HSC-14805-1] c35 N76-26448

MOTION PICTURES
Real time moving scene holographic camera system
[NASA-CASE-HFS-21087-1] c35 N74-17153
Real time, large volume, moving scene
holographic camera system
[NASA-CASE-HFS-22537-1] c35 N75-27328

MOTION SIMULATORS
Kinesthetic control simulator --- for pilot
training
[NASA-CASE-LAR-10276-1] c09 N75-15662

MOTION STABILITY
Hydraulic drive mechanism for leveling isolation
platforms
[NASA-CASE-XMS-03252] c15 N71-10658

MOTORS
Nonmagnetic thermal motor for magnetometer
movement
[NASA-CASE-XAR-03786] c09 N69-21313
System for maintaining motor at predetermined
speed using digital pulses
[NASA-CASE-XMP-06892] c09 N71-24805
Mechanical thermal motor
[NASA-CASE-HFS-23062-1] c37 N77-12402

MOUNTING
Mounting fixture for supporting thermobulb in
pipeline
[NASA-CASE-NPO-10158] c33 N71-16356
Mounting apparatus for temperature control system
[NASA-CASE-NFO-10138] c33 N71-16357
Inertial component clamping assembly design for
spacecraft guidance and control system mounting
[NASA-CASE-XMS-02184] c15 N71-20813
Techniques for packaging and mounting printed
circuit boards
[NASA-CASE-HFS-21919-1] c10 N73-25243
Lubricated journal bearing
[NASA-CASE-LBW-11076-3] c37 N75-30562
Translatory shock absorber for attitude sensors
[NASA-CASE-HFS-22905-1] c19 N76-22284
Deformable bearing seat
[NASA-CASE-LBW-12527-1] c37 N77-32500

MOVING TARGET INDICATORS
Automatic vehicle location system
[NASA-CASE-NFO-11850-1] c32 N74-12912

MULTICHANNEL COMMUNICATION
Tape guidance system for multichannel digital
recording system
[NASA-CASE-IMP-09453] c08 N71-19420
Plural channel data transmission system with
quadrature modulation and complementary
demodulation
[NASA-CASE-XAC-06302] c08 N71-19763
Improved phase lock loop for receiver in
multichannel telemetry system with suppressed
carrier
[NASA-CASE-NFO-11593-1] c07 N73-28012
Miniature multichannel biotelemetry system
[NASA-CASE-NFO-13065-1] c52 N74-26625
Medical subject monitoring systems ---
multichannel monitoring systems
[NASA-CASE-HSC-14180-1] c52 N76-14757

MULTIENGINE VEHICLES
Vortex attenuation method --- for multi-engine
aircraft
[NASA-CASE-LAR-12034-1] c02 N77-22045

MULTILAYER INSULATION
Electrode sealing and insulation for fuel cells
containing caustic liquid electrolytes using
powdered plastic and metal
[NASA-CASE-XMS-01625] c15 N71-23022
Multilayer insulation panels for cryogenic
liquid containers
[NASA-CASE-HFS-14023] c33 N71-25351
Electrical failure detector in solid rocket
propellant motor insulation against thermal
degradation by fuel grain
[NASA-CASE-IMP-03968] c14 N71-27186
Insulation foil and method of making
[NASA-CASE-LBW-11484-2] c24 N75-14839
Method of making an insulation foil
[NASA-CASE-LBW-11484-1] c24 N75-33181
Insulation for piping
[NASA-CASE-HSC-19523-1] c31 N76-16245

MULTIPATH TRANSMISSION
Anti-multipath digital signal detector
[NASA-CASE-LAR-11827-1] c32 N77-10392

MULTIPLE BEAM INTERVAL SCANNERS

Tracking antenna system with array for
synchronous satellite or ground based radar
[NASA-CASE-GSC-10553-1] c07 N71-19854
Variable beamwidth antenna --- with multiple
beam, variable feed system
[NASA-CASE-GSC-11862-1] c32 N76-18295

MULTIPLE DOCKING ADAPTERS
Probe and drogue assembly for mechanical linking
of two space vehicles
[NASA-CASE-XMS-03613] c31 N71-16346

MULTIPLE OUTPUT PROGRAMS
Multi-computer multiple data path hardware
exchange system
[NASA-CASE-NPO-13422-1] c60 N76-14818

MULTIPLEXING
Doppler frequency shift correction device for
multiplex communication with Applications
Technology Satellites
[NASA-CASE-XGS-02749] c07 N69-39978
Multiplexed communication system design
including automatic correction of transmission
errors introduced by frequency spectrum shifts
[NASA-CASE-IMP-01306] c07 N71-20814
Satellite network synchronization system with
multiple access to multiplex repeater
[NASA-CASE-GSC-10390-1] c07 N72-11149
Apparatus with summing network for compression
of analog data by decreasing slope threshold
sampling
[NASA-CASE-NFO-10769] c08 N72-11171
Development and characteristics of data
multiplex circuit using field effect
transistors arranged in tree switching
configuration
[NASA-CASE-NPO-11333] c08 N72-22162
Telemetry and transmission system with
programmed sampling and multiplexing
[NASA-CASE-GSC-11388-1] c07 N73-24187
Television multiplexing system, using single
crystal controlled clock for signal
synchronization
[NASA-CASE-KSC-10654-1] c07 N73-30115
Asynchronous, multiplexing, single line
transmission and recovery data system --- for
satellite use
[NASA-CASE-NPO-13321-1] c32 N75-26195
Correlation type phase detector --- with time
correlation integrator for frequency
multiplexed signals
[NASA-CASE-GSC-11744-1] c33 N75-26243
System for producing chroma signals
[NASA-CASE-HSC-14683-1] c74 N77-18893

MULTIPLIERS
Pulse duration modulation multiplier system
[NASA-CASE-XER-09213] c07 N71-12390
Design and development of variable pulse width
multiplier
[NASA-CASE-XLA-02850] c09 N71-20447
Capacitance multiplier and filter synthesizing
network
[NASA-CASE-NPO-11948-1] c33 N74-32712

MULTISPECTRAL BAND SCANNERS
Optical process for producing classification
maps from multispectral data
[NASA-CASE-HSC-14472-1] c43 N77-10584
An interactive color display for multispectral
imagery using correlation clustering
[NASA-CASE-HSC-16253-1] c43 N77-31583

MULTISPECTRAL PHOTOGRAPHY
Computerized optical system for producing
multiple images of a scene simultaneously
[NASA-CASE-HSC-12404-1] c23 N73-13661
Optical process for producing classification
maps from multispectral data
[NASA-CASE-HSC-14472-1] c43 N77-10584
An interactive color display for multispectral
imagery using correlation clustering
[NASA-CASE-HSC-16253-1] c43 N77-31583

MULTISTAGE ROCKET VEHICLES
Techniques for recovery of multistage rocket
vehicles by providing lifting surfaces on
individual sections
[NASA-CASE-IMP-00389] c31 N70-34176
Steerable solid propellant rocket motor adapted
to effect payload orientation as multistage
rocket stage or reduce velocity as retrorocket
[NASA-CASE-IMP-00234] c28 N70-38645

Multi-mission space vehicle module stage design
[NASA-CASE-XMP-01543] c31 N71-17730

Separation mechanism for use between stages of
multistage rocket vehicles
[NASA-CASE-XLA-00188] c15 N71-22874

Development of remotely controlled shaped charge
for lateral displacement of rocket stages
after separation
[NASA-CASE-XIA-04804] c31 N71-23008

Frangible connecting link suitable for rocket
stage separation
[NASA-CASE-HSC-11849-1] c15 N72-22488

MULTIVIBRATORS

Extra-long monostable multivibrator employing
bistable semiconductor switch to allow
charging of timing circuit
[NASA-CASE-XGS-00381] c09 N70-34819

Variable frequency magnetic coupled
multivibrator with temperature compensated
frequency control circuit
[NASA-CASE-XGS-00458] c09 N70-38604

Variable frequency magnetic coupled
multivibrator with output signal of constant
amplitude and waveform
[NASA-CASE-XGS-00131] c09 N70-38995

Improved semiconductor multivibrator circuit
which approaches 100 percent efficiency
[NASA-CASE-XAC-00942] c10 N71-16042

Transistorized dc-coupled multivibrator with
noninverted output signal
[NASA-CASE-XNP-09450] c10 N71-18723

One shot multivibrator circuit for producing
long duration output pulses
[NASA-CASE-ARC-10137-1] c09 N71-28468

MUSCLES

Subminiature insertable force transducer ---
including a strain gage to measure forces in
muscles
[NASA-CASE-NFO-13423-1] c33 N75-31329

MUSCULAR FUNCTION

Miniature muscle displacement transducer
[NASA-CASE-NFO-13519-1] c33 N76-19338

MUSCULOSKELETAL SYSTEM

Method and apparatus for applying compressional
forces to skeletal structure of subject to
simulate force during ambulatory conditions
[NASA-CASE-ARC-10100-1] c05 N71-24738

MYOCARDIUM

Myocardium wall thickness transducer and
measuring method
[NASA-CASE-NFO-13644-1] c52 N76-29895

N

NACELLES

Deflector for preventing objects from entering
nacelle inlets of jet aircraft
[NASA-CASE-XLE-00388] c28 N70-34788

Afterburner-equipped jet engine nacelle with
slotted configuration afterbody
[NASA-CASE-XLA-10450] c28 N71-21493

NAVIGATION AIDS

Magnetic heading reference
[NASA-CASE-LAR-11387-1] c04 N76-20114

NAVIGATION INSTRUMENTS

Sun angle calculator
[NASA-CASE-HSC-12617-1] c35 N76-29552

NAVIGATION SATELLITES

Satellite aided aircraft collision avoidance
system effective for large number of aircraft
[NASA-CASE-ERC-10090] c21 N71-24948

NEAR INFRARED RADIATION

Collimator for analyzing spatial location of
near and distant sources of radiation
[NASA-CASE-NFS-20546-2] c14 N73-30389

NEGATIVE FEEDBACK

Complementary regenerative transistorized switch
circuit employing positive and negative feedback
[NASA-CASE-XGS-02751] c09 N71-23015

Solid-state current transformer
[NASA-CASE-NFS-22560-1] c33 N77-14335

NEODYMIUM LASERS

Length controlled stabilized mode-lock Nd:YAG
laser
[NASA-CASE-GSC-11571-1] c36 N77-25499

NETWORK SYNTHESIS

Left and right hand circular electromagnetic
polarization excitation by phase shifter and
hybrid networks

[NASA-CASE-GSC-10021-1] c09 N71-24595

High speed phase detector design indicating
phase relationship between two square wave
input signals
[NASA-CASE-XNP-01306-2] c09 N71-24596

NEUROGLIA

Percutaneous connector device
[NASA-CASE-KSC-10849-1] c52 N77-14738

NEUTRALIZERS

Method and apparatus for neutralizing potentials
induced on spacecraft surfaces
[NASA-CASE-GSC-11963-1] c33 N77-10429

NEUTRON EMISSION

Deuterium pass through target --- neutron
emitting target
[NASA-CASE-LEW-11866-1] c72 N76-15860

NICKEL

Process for producing dispersion strengthened
nickel with aluminum comprising metallic
matrices embedded with oxides or other
hyperfine compounds
[NASA-CASE-XLE-06969] c17 N71-24142

Selective nickel deposition on irradiation
sensitive compounds
[NASA-CASE-LEW-10965-1] c15 N72-25452

Brazing alloy composition
[NASA-CASE-XNP-06053] c26 N75-27126

Method of making reinforced composite structure
[NASA-CASE-LEW-12619-1] c24 N77-19171

NICKEL ALLOYS

Preparation of nickel alloys for jet turbine
blades operating at high temperatures
[NASA-CASE-XLE-00151] c17 N70-33283

Nickel alloy series for aerospace structures
subjected to high temperatures
[NASA-CASE-XLE-00283] c17 N70-36616

Nickel base alloy with resistance to oxidation
at high temperatures and superior
stress-rupture properties
[NASA-CASE-XLE-02082] c17 N71-16026

High strength nickel based alloys
[NASA-CASE-LEW-10874-1] c17 N72-22535

Diffusion welding --- heat treatment of nickel
alloys following single step vacuum welding
process
[NASA-CASE-LEW-11388-2] c37 N74-21055

Method of heat treating age-hardenable alloys
[NASA-CASE-XNP-01311] c26 N75-29236

Zirconium modified nickel-copper alloy
[NASA-CASE-LEW-12245-1] c26 N77-20201

Directionally solidified eutectic gamma plus
beta nickel-base superalloys
[NASA-CASE-LEW-12906-1] c26 N77-32279

Nickel base alloy --- for gas turbine engine
stator vanes
[NASA-CASE-LEW-12270-1] c26 N77-32280

NICKEL CADMIUM BATTERIES

Heat flow calorimeter --- measures output of
Ni-Cd batteries
[NASA-CASE-GSC-11434-1] c34 N74-27859

Method and apparatus for reconditioning
nickel-cadmium batteries
[NASA-CASE-NFS-23270-1] c44 N77-12511

NICKEL COATINGS

Intermetallic chromium containing nickel
aluminide for high temperature corrosion
protection of stainless steels
[NASA-CASE-LEW-11267-1] c17 N73-32414

NICKEL COMPOUNDS

Including didymium hydrate in nickel hydroxide
of positive electrode of storage batteries to
increase ampere hour capacity
[NASA-CASE-IGS-03505] c03 N71-10608

Brazing alloy
[NASA-CASE-XNP-03878] c26 N75-27127

NICKEL PLATE

Nickel plating onto etched aluminum castings
[NASA-CASE-XNP-04148] c17 N71-24830

NIOBIUM

Organometallic compounds of niobium and tantalum
useful for film deposition
[NASA-CASE-XNP-04023] c06 N71-28808

NITRIC OXIDE

Reduction of nitric oxide emissions from a
combustor
[NASA-CASE-ARC-10814-2] c25 N77-31260

NITRIDES

Growth of gallium nitride crystals
[NASA-CASE-LAR-11302-1] c25 N75-13054

NITRILES

Intumescent paint containing nitrile rubber for fire protection
[NASA-CASE-ARC-10196-1] c18 N73-13562
Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LEW-12053-1] c27 N74-34579

NITROAMINES

Nitroaniline sulfate, intumescent paints
[NASA-CASE-ARC-10099-1] c18 N71-15469
Mercaptan terminated polymer containing sulfonic acid salts of nitrosubstituted aromatic amines for heat and moisture resistant coatings
[NASA-CASE-ARC-10325] c06 N72-25147
Nitramine propellants
[NASA-CASE-NFO-14103-1] c28 N77-25346

NITROGEN

III-V photocathode with nitrogen doping for increased quantum efficiency
[NASA-CASE-NFO-12134-1] c33 N76-31409

NITROGEN OXIDES

Combustion engine --- for air pollution control
[NASA-CASE-NFO-13671-1] c37 N77-31497

NITROGEN TETROXIDE

Gas chromatographic method for determining water in nitrogen tetroxide rocket propellant
[NASA-CASE-NFO-10234] c06 N72-17094

NITROGUANIDINE

Solid propellant stabilizer containing nitroguanidine
[NASA-CASE-NFO-12000] c27 N72-25699

NOISE GENERATORS

Pseudo-noise test set for communication system evaluation --- test signals
[NASA-CASE-MFS-22671-1] c35 N75-21582
Method of and means for testing a tape record/playback system
[NASA-CASE-MFS-22671-2] c35 N77-17426

NOISE METERS

Instrumentation for measurement of aircraft noise and sonic boom
[NASA-CASE-LAR-11173-1] c35 N75-19614
Differential sound level meter
[NASA-CASE-LAR-12106-1] c35 N77-23441

NOISE REDUCTION

Upper surface, external flow, jet-augmented flap configuration for high wing jet aircraft for noise reduction
[NASA-CASE-XLA-00087] c02 N70-33332
Cassegrain antenna subreflector flange for suppressing ground noise and increasing antenna transmitting efficiency
[NASA-CASE-XNP-00683] c09 N70-35425
Device for adding water to high velocity exhaust jets to reduce velocity, noise, and temperature
[NASA-CASE-XMP-01813] c28 N70-41582
Variable time constant, wide frequency range smoothing network for noise removal from pulse chains
[NASA-CASE-XGS-01983] c10 N70-41964
Digital telemetry system apparatus to reduce tape recorder wow and flutter noise during playback
[NASA-CASE-XGS-01812] c07 N71-23001
Audio signal processing system for noise surge elimination at low amplitude audio input
[NASA-CASE-MSC-12223-1] c07 N71-26181
Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide frequency range and minimizing noise effects
[NASA-CASE-XNP-09830] c14 N71-26266
Noise elimination in coherent imaging system by axial rotation of optical lens for spectral distribution of degrading affects
[NASA-CASE-GSC-11133-1] c23 N72-11568
Audio equipment for removing impulse noise from audio signals
[NASA-CASE-NFO-11631] c10 N73-12244
Jet aircraft exhaust nozzle for noise reduction
[NASA-CASE-LAR-10951-1] c28 N73-19819
Development of aircraft configuration for reduction of jet aircraft noise by exhausting engine gases over upper surface of wing
[NASA-CASE-LAR-11087-1] c02 N73-26008
Method for eliminating noise and debris of explosive welding techniques by using complete enclosure

[NASA-CASE-LAR-10941-2] c15 N73-32371
Gas turbine exhaust nozzle --- for noise reduction
[NASA-CASE-LEW-11569-1] c07 N74-15453
Totally confined explosive welding --- apparatus to reduce noise level and protect personnel during explosive bonding
[NASA-CASE-LAR-10941-1] c37 N74-21057
Jet exhaust noise suppressor
[NASA-CASE-LEW-11286-1] c07 N74-27490
Supersonic fan blading --- noise reduction in turbofan engines
[NASA-CASE-LEW-11402-1] c07 N74-28226
Variably positioned guide vanes for aerodynamic choking
[NASA-CASE-LAR-10642-1] c07 N74-31270
Noise suppressor --- for turbofan engine by incorporating annular acoustically porous elements in exhaust and inlet ducts
[NASA-CASE-LAR-11141-1] c07 N74-32418
Abating exhaust noises in jet engines
[NASA-CASE-ARC-10712-1] c07 N74-33218
Television noise reduction device
[NASA-CASE-MSC-12607-1] c32 N75-21485
Cascade plug nozzle --- for jet noise reduction
[NASA-CASE-LAR-11674-1] c07 N76-18117
Noise suppressor for turbo fan jet engines
[NASA-CASE-ARC-10812-1] c07 N76-18131
Apparatus for reducing aerodynamic noise in a wind tunnel
[NASA-CASE-MFS-23099-1] c09 N76-23273
Optical noise suppression device and method --- laser light exposing film
[NASA-CASE-MSC-12640-1] c74 N76-31998
Apparatus and method for jet noise suppression
[NASA-CASE-LAR-11903-1] c07 N77-15036
Acoustically swept rotor
[NASA-CASE-ARC-11106-1] c05 N77-31130

NOISE TEMPERATURE
Input radio frequency circuit for switching type absolute temperature measuring radiometer for noise sources
[NASA-CASE-ERC-11020] c14 N71-26774

NOISE THRESHOLD
Threshold extension device for improving operating performance of frequency modulation demodulators by eliminating click-type noise impulses
[NASA-CASE-MSC-12165-1] c07 N71-33696

NONDESTRUCTIVE TESTS
Nondestructive radiographic tests of resistance welds
[NASA-CASE-XNP-02588] c15 N71-18613
Space environment simulator for testing spacecraft components under aerospace conditions
[NASA-CASE-NFO-10141] c11 N71-24964
Apparatus for semiautomatic inspection of microfilmed documents for density, resolution, size, and position
[NASA-CASE-MFS-20240] c14 N71-26788
Dye penetrant and technique for nondestructive tests of solid surfaces contacted by liquid oxygen
[NASA-CASE-XMF-02221] c18 N71-27170
Method and photodetector device for locating abnormal voids in low density materials
[NASA-CASE-MFS-20044] c14 N71-28993
Holographic system for nondestructive testing
[NASA-CASE-MFS-21704-1] c35 N75-25124
Hybrid holographic non-destructive test system --- optical and acoustical methods capable of detecting flaws in materials
[NASA-CASE-MFS-23114-1] c35 N76-24529
Method and apparatus for nondestructive testing of pressure vessels
[NASA-CASE-NFO-12142-1] c38 N76-28563
Nondestructive method for instrumenting helicopter rotor blades
[NASA-CASE-LAR-11201-1] c35 N77-22452

NON-EQUILIBRIUM PLASMAS
Plasma probes having guard ring and primary sensor at same potential to prevent stray wall current collection in ionized gases
[NASA-CASE-XLE-00690] c25 N69-39884

NONFLAMMABLE MATERIALS
Intumescent paint containing nitrile rubber for fire protection
[NASA-CASE-ARC-10196-1] c18 N73-13562
Non-flammable elastomeric fiber from a fluorinated elastomer and containing an

- halogenated flame retardant
[NASA-CASE-MSC-14331-1] c27 N76-24405
- Process for producing flame resistant polyamides and products produced thereby
[NASA-CASE-MSC-16074-1] c27 N77-14262
- Low density bismaleimide-carbon microballoon composites
[NASA-CASE-ABC-11040-1] c24 N77-19173
- NONLINEAR FEEDBACK**
Coherent receiver employing nonlinear coherence detection for carrier tracking
[NASA-CASE-NFO-11921-1] c32 N74-30523
- Nonlinear nonsingular feedback shift registers
[NASA-CASE-NFO-13451-1] c33 N76-14373
- NONLINEAR SYSTEMS**
Detector assembly for discriminating first signal with respect to presence or absence of second signal at time of occurrence of first signal
[NASA-CASE-INP-00701] c09 N70-40272
- Describing continuous analog to digital converter with parallel digital output and nonlinear feedback
[NASA-CASE-XAC-04031] c08 N71-18594
- Split range transducer
[NASA-CASE-XIA-11189] c10 N72-20222
- NOSE CONES**
Automatically deploying nozzle exit cone extension
[NASA-CASE-XLE-01640] c31 N71-15637
- Nose cone rounded heat resistant antenna comprising plurality of adjacent layers of silica not introducing paths of high thermal conductivity through ablative shield
[NASA-CASE-XMS-04312] c07 N71-22984
- NOSE WHEELS**
Nose gear steering system for vehicles with main skids to provide directional stability after loss of aerodynamic control
[NASA-CASE-XIA-01804] c02 N70-34160
- NOTCH TESTS**
Vee-notching device --- with adjustable carriage
[NASA-CASE-NFS-20730-1] c39 N74-13131
- Notch filter
[NASA-CASE-NFS-23303-1] c32 N77-18307
- NOTCHES**
Notch filter
[NASA-CASE-NFS-23303-1] c32 N77-18307
- NOZZLE DESIGN**
High thrust annular liquid propellant rocket engine and exhaust nozzle design
[NASA-CASE-XLE-00078] c28 N70-33284
- Penshaped, supersonic exhaust nozzle design
[NASA-CASE-XLE-00057] c28 N70-38711
- Telescoping-spike supersonic nozzle for turbojet or ramjet engines
[NASA-CASE-XLE-00005] c28 N70-39899
- Automatically deploying nozzle exit cone extension
[NASA-CASE-XLE-01640] c31 N71-15637
- Propellant injection assembly having individually removable and replaceable nozzles for liquid fueled rocket engines
[NASA-CASE-INP-00968] c28 N71-15660
- Development of collapsible nozzle extension for rocket engines
[NASA-CASE-NFS-11497] c28 N71-16224
- Design and development of gas turbine combustion unit with nozzle guide vanes for introducing diluent air into combustion gases
[NASA-CASE-XLE-103477-1] c28 N71-20330
- Prestressed rocket nozzle with ceramic inner rings and refractory metal outer rings
[NASA-CASE-INP-02888] c18 N71-21068
- Scanning nozzle plating system --- for etching or plating metals on substrates without masking
[NASA-CASE-NFO-11758-1] c31 N74-23065
- Improved nozzle for use with abrasive and/or corrosive materials
[NASA-CASE-NFO-13823-1] c37 N77-17466
- NOZZLE FLOW**
System for aerodynamic control of rocket vehicles by secondary injection of fluid into nozzle exhaust stream
[NASA-CASE-XLA-01163] c21 N71-15582
- Constructing fluid spike nozzle to eliminate heat transfer and high temperature problems inherent in physical spikes
[NASA-CASE-IGS-01143] c31 N71-15647
- Electronic recording system for spatial mass distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
[NASA-CASE-NFO-10185] c10 N71-26339
- Tertiary flow injection system for thrust vectoring of propulsive nozzle flow
[NASA-CASE-NFS-20831] c28 N71-29153
- Multi-purpose wind tunnel reaction control model block
[NASA-CASE-MSC-19706-1] c09 N77-19077
- NOZZLE GEOMETRY**
Two dimensional wedge/translating shroud nozzle
[NASA-CASE-LAB-11919-1] c07 N76-22202
- NOZZLE INSERTS**
Flexible rocket motor nozzle closure device to aid ignition and protect rocket chamber from foreign objects
[NASA-CASE-XLA-02651] c28 N70-41967
- NUCLEAR ELECTRIC POWER GENERATION**
Nuclear electric generator for accelerating charged propellant particles in electrostatic propulsion system
[NASA-CASE-XLE-00818] c22 N70-34248
- NUCLEAR EXPLOSION EFFECT**
Development of method for protecting large and oddly shaped areas from radiant and convective heat
[NASA-CASE-INP-01310] c33 N71-28852
- NUCLEAR FUEL ELEMENTS**
Tungsten-coated tungsten-uranium dioxide nuclear fuel plates
[NASA-CASE-XLE-00209] c22 N73-32528
- NUCLEAR MAGNETIC RESONANCE**
Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide frequency range and minimizing noise effects
[NASA-CASE-INP-09830] c14 N71-26266
- NUCLEAR POWER PLANTS**
Development and characteristics of natural circulation radiator for use with nuclear power plants installed in lunar space stations
[NASA-CASE-IRQ-03673] c33 N71-29046
- NUCLEAR PUMPING**
Volumetric direct nuclear pumped laser
[NASA-CASE-LAB-12183-1] c36 N77-21424
- NUCLEAR REACTOR CONTROL**
Absorbing gas reactivity control system for minimizing power distribution and perturbation in nuclear reactors
[NASA-CASE-XLE-04599] c22 N72-20597
- NUCLEAR REACTORS**
Nuclear thermionic converter --- tungsten-thorium oxide rods
[NASA-CASE-NFO-13121-1] c73 N77-18891
- NUCLEAR ROCKET ENGINES**
Nuclear gaseous reactor for heating working fluid to high temperatures
[NASA-CASE-XLE-00321] c22 N70-34572
- NUCLEATE BOILING**
Method for improving heat transfer characteristics in nucleate boiling process
[NASA-CASE-XMS-04268] c33 N71-16277
- NULL ZONES**
Manual control mechanism for adjusting control rod to null position
[NASA-CASE-XLA-01808] c15 N71-20740
- NUMBER THEORY**
Binary concatenated coding system
[NASA-CASE-MSC-14082-1] c60 N76-23850
- NUMERICAL CONTROL**
Digital sensor for counting fringes produced by interferometers with improved sensitivity and one photomultiplier tube to eliminate alignment problem
[NASA-CASE-LAB-10204] c14 N71-27215
- NUMERICAL INTEGRATION**
Apparatus for computing square roots
[NASA-CASE-IGS-04768] c08 N71-19437
- NOTATION**
Flexible turnstile antenna system for reducing nutation in spin-oriented satellites
[NASA-CASE-INP-00442] c31 N71-10747
- Nutation damper for use on spinning body
[NASA-CASE-GSC-11205-1] c15 N73-25513
- NUTS (FASTENERS)**
Contamination free separation nut eliminating combustion products from ambient surroundings generated by squib firing
[NASA-CASE-IGS-01971] c15 N71-15922

Split nut and bolt separation device
[NASA-CASE-XNP-06914] c15 N71-21489
Device for securing together structural members
with axially stretched bolt and nut
[NASA-CASE-GSC-11149-1] c15 N73-30457

O

O RING SEALS

High pressure four-way valve with O ring adapted
to pass across inlet port
[NASA-CASE-XNP-00214] c15 N70-36908

OBLIQUE WINGS

Oblique-wing supersonic aircraft
[NASA-CASE-ARC-10470-3] c05 N76-29217

OCEAN SURFACE

High visibility air sea rescue panel
[NASA-CASE-MSC-12564-1] c54 N76-15792

OCEAN THERMAL ENERGY CONVERSION

Ocean thermal plant
[NASA-CASE-KSC-11034-1] c44 N77-21666

OHMMETERS

Development of electrical system for indicating
optimum contact between electrode and metal
surface to permit improved soldering operation
[NASA-CASE-KSC-10242] c15 N72-23497

OIL RECOVERY

In-situ laser retorting of oil shale
[NASA-CASE-LEW-12217-1] c36 N77-18429
Oil and fat absorbing polymers
[NASA-CASE-WFO-11609-2] c27 N77-31308

OILS

Color photointerpretation of interference colors
reflected from thin film oil-coated components
in moving gases for gas flow visualization
[NASA-CASE-XNP-01779] c12 N71-20815
Oil and fat absorbing polymers
[NASA-CASE-WFO-11609-2] c27 N77-31308

OMNIDIRECTIONAL ANTENNAS

Microwave omnidirectional antenna for use on
spacecraft
[NASA-CASE-XLA-03114] c09 N71-22888
Vertically stacked collinear array of
independently fed omnidirectional antennas for
use in collision warning systems on commercial
aircraft
[NASA-CASE-LAR-10545-1] c09 N72-21244
Omnidirectional antenna array with
circumferential slots for mounting on
cylindrical space vehicle
[NASA-CASE-LAR-10163-1] c09 N72-25247

ONBOARD EQUIPMENT

Survival couch for aircraft or spacecraft crews
[NASA-CASE-XLA-00118] c05 N70-33285
Cryogenic storage system for gases onboard
spacecraft
[NASA-CASE-XMS-04390] c31 N70-41871
Fiber optic transducers for monitoring and
analysis of vibration in aerospace vehicles
and onboard equipment
[NASA-CASE-XNP-02433] c14 N71-10616
Design and construction of satellite appendage
tie-down cord
[NASA-CASE-XGS-02554] c31 N71-21064
Satellite aided aircraft collision avoidance
system effective for large number of aircraft
[NASA-CASE-ERC-10090] c21 N71-24948
Closed loop servosystem for variable speed tape
recorders onboard spacecraft
[NASA-CASE-WFO-10700] c07 N71-33613
Collapsible couch system for manned space vehicles
[NASA-CASE-MSC-13140] c05 N72-11085
Monostable multivibrator for conserving power in
spacecraft systems
[NASA-CASE-GSC-10082-1] c10 N72-20221
Delayed simultaneous appendage release mechanism
for use on spacecraft equipped with despin
mechanisms and releasable components
[NASA-CASE-GSC-10814-1] c03 N73-20039
Electronic strain level counter on in-flight
aircraft
[NASA-CASE-LAR-10756-1] c32 N73-26910
Magnetic heading reference
[NASA-CASE-LAR-11387-1] c04 N76-20114
OPERATIONAL AMPLIFIERS
Digital automatic gain amplifier
[NASA-CASE-KSC-11008-1] c33 N77-21321
OPHTHALMOLOGY
Ultrasonic device for ophthalmic eye surgery

with safe removal of macerated material
[NASA-CASE-LEW-11669-1] c05 N73-27062
Ophthalmic liquifaction pump
[NASA-CASE-LEW-12051-1] c52 N75-33640
Improved tissue macerating instrument ---
ophthalmic liquifaction pump
[NASA-CASE-LEW-12668-1] c52 N76-23837
Flow compensating pressure regulator --- for
ophthalmic applications
[NASA-CASE-LEW-12718-1] c35 N77-20408
OPTICAL COMMUNICATION
Fabry-Perot interferometer retrodirective
reflector modulator for optical communication
[NASA-CASE-XGS-04480] c16 N69-27491
Specifications and drawings for semipassive
optical communication system
[NASA-CASE-XLA-01090] c07 N71-12389
Optical communication system with gas filled
waveguide for laser beam transmission
[NASA-CASE-HQN-10541-4] c16 N71-27183
Development and characteristics of optical
communications system based on modulation of
light beams
[NASA-CASE-XLA-01090] c16 N71-28963
High resolution radar transmitting system for
transmitting optical pulses to targets
[NASA-CASE-WFO-11426] c07 N73-26119
Apparatus for simulating optical transmission
links
[NASA-CASE-GSC-11877-1] c74 N76-18913
Fiber distributed feedback laser
[NASA-CASE-WFO-13531-1] c36 N76-24553
Polarization compensator for optical
communications
[NASA-CASE-GSC-11782-1] c74 N76-30053
Fiber optic multiplex optical transmission system
[NASA-CASE-KSC-11047-1] c74 N77-15826
Gregorian all-reflective optical system
[NASA-CASE-GSC-12058-1] c74 N77-26942
Wideband heterodyne receiver for laser
communication system
[NASA-CASE-GSC-12053-1] c32 N77-28346
OPTICAL COUPLING
Automatic quadrature control and measuring system
--- using optical coupling circuitry
[NASA-CASE-WFS-21660-1] c35 N74-21017
OPTICAL DATA PROCESSING
Optical data processing system using
paraboloidal reflecting surfaces
[NASA-CASE-GSC-11296-1] c23 N73-30666
Recorder/processor apparatus --- for optical
data processing
[NASA-CASE-GSC-11553-1] c35 N74-15831
An interleaving device --- for computer logic
circuits used in optical data processing
[NASA-CASE-GSC-12111-2] c60 N77-31800
OPTICAL EMISSION SPECTROSCOPY
Maksutov spectrograph for low light level research
[NASA-CASE-XLA-10402] c14 N71-29041
OPTICAL EQUIPMENT
Detection instrument for light emitted from ATP
biochemical reaction
[NASA-CASE-XGS-05534] c23 N71-16355
Optical characteristics measuring apparatus
[NASA-CASE-XNP-08840] c23 N71-16365
Combined optical attitude and altitude
indicating instrument for use in aircraft or
spacecraft
[NASA-CASE-XLA-01907] c14 N71-23268
Design and development of optical interferometer
with laser light source for application to
schlieren systems
[NASA-CASE-XLA-04295] c16 N71-24170
Highly stable optical mirror assembly optimizing
image quality of light diffraction patterns
[NASA-CASE-ERC-10001] c23 N71-24868
Optical device containing rotatable prism and
reflecting mirror for generating precise angles
[NASA-CASE-XGS-04173] c19 N71-26674
Development and characteristics of Petzval type
objective including field shaping lens for
focusing light of specified wavelength band on
curved photoreceptor
[NASA-CASE-GSC-10700] c23 N71-30027
Slotted fine-adjustment support for optical
devices
[NASA-CASE-WFS-20249] c15 N72-11386
Development of process for constructing
protective covers for solar cells

- [NASA-CASE-GSC-11514-1] c03 N72-24037
Development of light sensing system for controlled orientation of object relative to sun or other light source
- [NASA-CASE-NPO-11311] c14 N72-25414
Borescope with adjustable hinged telescoping optical system
- [NASA-CASE-MFS-15162] c14 N72-32452
Development and characteristics of cyclically operable, optical shutter for use as focal plane shutter for transmitting single radiation pulses
- [NASA-CASE-NFO-1C758] c14 N73-14427
Method for producing reticles for use in outer space
- [NASA-CASE-GSC-11188-2] c21 N73-19630
Method and equipment for locating earth infrared horizon from space, independent of season and latitude
- [NASA-CASE-LAR-10726-1] c14 N73-20475
Optical imaging system for increasing light absorption efficiency of imaging detector
- [NASA-CASE-ARC-10194-1] c23 N73-20741
Development of optical system for detecting defective components in rotating machinery with emphasis on bearing assemblies
- [NASA-CASE-KSC-10752-1] c15 N73-27407
Attitude sensor
- [NASA-CASE-LAR-10586-1] c19 N74-15089
Formation of star tracking reticles
- [NASA-CASE-GSC-11188-3] c74 N74-20008
Method and apparatus for optically monitoring the angular position of a rotating mirror
- [NASA-CASE-GSC-11353-1] c74 N74-21304
Single reflector interference spectrometer and drive system therefor
- [NASA-CASE-NFO-11932-1] c35 N74-23040
Strain gauge ambiguity sensor for segmented mirror active optical system
- [NASA-CASE-MFS-20506-1] c35 N75-12273
Optical alignment device
- [NASA-CASE-ARC-10932-1] c74 N76-22993
Visual examination apparatus
- [NASA-CASE-RE-ARC-10329-2] c52 N76-30793
Optical instrument employing reticle having preselected visual response pattern formed thereon
- [NASA-CASE-ARC-10976-1] c74 N77-22950
Water system virus detection
- [NASA-CASE-MSC-16098-1] c51 N77-24755
Opto-mechanical subsystem with temperature compensation through isothermal design
- [NASA-CASE-GSC-12059-1] c35 N77-27366
Method and apparatus for producing an image from a transparent object
- [NASA-CASE-GSC-11989-1] c74 N77-28932
Three-mirror telescope
- [NASA-CASE-MFS-23675-1] c74 N77-28937
Method of treating the surface of a glass member
- [NASA-CASE-GSC-12110-1] c27 N77-32308
- OPTICAL FILTERS**
- Lens assembly for solar furnace or solar simulator
- [NASA-CASE-XNP-04111] c14 N71-15622
Noise elimination in coherent imaging system by axial rotation of optical lens for spectral distribution of degrading affects
- [NASA-CASE-GSC-11133-1] c23 N72-11568
Optical conversion method
- [NASA-CASE-MSC-12618-1] c74 N76-18917
Optical noise suppression device and method --- laser light exposing film
- [NASA-CASE-MSC-12640-1] c74 N76-31998
System for producing chroma signals
- [NASA-CASE-MSC-14683-1] c74 N77-18893
- OPTICAL HETERODYNING**
- Computerized optical system for producing multiple images of a scene simultaneously
- [NASA-CASE-MSC-12404-1] c23 N73-13661
Gregorian all-reflective optical system
- [NASA-CASE-GSC-12058-1] c74 N77-26942
Wideband heterodyne receiver for laser communication system
- [NASA-CASE-GSC-12053-1] c32 N77-28346
- OPTICAL MEASUREMENT**
- Passive optical wind and turbulence remote detection system
- [NASA-CASE-INP-14032] c20 N71-16340
Ellipsoidal mirror reflector for measuring reflectance
- [NASA-CASE-IGS-05291] c23 N71-16341
Single reflector interference spectrometer and drive system therefor
- [NASA-CASE-NFO-11932-1] c35 N74-23040
Hybrid holographic non-destructive test system --- optical and acoustical methods capable of detecting flaws in materials
- [NASA-CASE-MFS-23114-1] c35 N76-24529
- OPTICAL MEASURING INSTRUMENTS**
- Design and development of optically pumped resonance magnetometer for determining vectoral components in spatial coordinate system
- [NASA-CASE-IGS-04879] c14 N71-20428
Optical gauging system for monitoring machine tool alignment
- [NASA-CASE-XAC-09489-1] c15 N71-26673
Optical system for selecting particular wavelength light beams from multiple wavelength light source
- [NASA-CASE-ERC-10248] c14 N72-17323
Optical sensing of supersonic flows by correlating deflections in laser beams through flow
- [NASA-CASE-MFS-20642] c14 N72-21407
Multiparameter vision testing apparatus
- [NASA-CASE-MSC-13601-2] c54 N75-27759
Device for measuring the contour of a surface
- [NASA-CASE-LAR-11869-1] c35 N77-10497
- OPTICAL PATHS**
- Optical instruments
- [NASA-CASE-MSC-14096-1] c74 N74-15095
- OPTICAL PROPERTIES**
- Remote-reading torquemeter for use where high horsepower are transmitted at high rotative speeds
- [NASA-CASE-XLE-00503] c14 N70-34818
Quasi-optical microwave circuit with dielectric body for use with oversize waveguides
- [NASA-CASE-ERC-10011] c07 N71-29065
Development of light sensing system for controlled orientation of object relative to sun or other light source
- [NASA-CASE-NPO-11311] c14 N72-25414
Design and development of light sensing device for controlling orientation of object relative to sun or other light source
- [NASA-CASE-NPO-11201] c14 N72-27409
Device and method for determining X ray reflection efficiency, scattering properties, and surface finish of optical surfaces
- [NASA-CASE-MFS-20243] c23 N73-13662
Formation of star tracking reticles
- [NASA-CASE-GSC-11188-3] c74 N74-20008
Optically actuated two position mechanical mover
- [NASA-CASE-NPO-13105-1] c37 N74-21060
- OPTICAL PUMPING**
- Xenon flashlamp driver system for optical laser pumping
- [NASA-CASE-ERC-10283] c16 N72-25485
Laser head for simultaneous optical pumping of several dye lasers --- with single flash lamp
- [NASA-CASE-LAR-11341-1] c36 N75-19655
- OPTICAL PYROMETERS**
- Filter arrangement for controlling light intensity in motion picture camera used in optical pyrometry
- [NASA-CASE-XIA-00062] c14 N70-33254
- OPTICAL RADAR**
- Acquisition and tracking system for optical radar
- [NASA-CASE-MFS-20125] c16 N72-13437
- OPTICAL RANGE FINDERS**
- Electro-optical attitude sensing device for landing approach of flight vehicle
- [NASA-CASE-XNS-01994-1] c14 N72-17326
Optical range finder using reflective first surfaces mirror and transmitting beam splitter
- [NASA-CASE-MSC-12105-1] c14 N72-21409
- OPTICAL REFLECTION**
- Hybrid holographic system using reference, transmitted, and reflected beams simultaneously
- [NASA-CASE-MFS-20074] c16 N71-15565
Optical device containing rotatable prism and reflecting mirror for generating precise angles
- [NASA-CASE-IGS-04173] c19 N71-26674
Illumination system design for use as sunlight simulator in space environment simulators with multiple light sources reflected to single virtual source
- [NASA-CASE-BQN-10781] c23 N71-30292

- Composition of diffuse reflective coating containing sodium chloride in combination with diol solvent and organic wetting and drying agents
[NASA-CASE-GSC-11214-1] c06 N73-13128
- Schlieren system employing antiparallel reflector in the forward direction
[NASA-CASE-ARC-10971-1] c09 N76-26224
- Gregorian all-reflective optical system
[NASA-CASE-GSC-12058-1] c74 N77-26942
- Lightweight reflector assembly
[NASA-CASE-NFO-13707-1] c74 N77-28933
- OPTICAL RESONANCE**
- Design and development of optically pumped resonance magnetometer for determining vectoral components in spatial coordinate system
[NASA-CASE-XGS-004879] c14 N71-20428
- Laser system with an antiresonant optical ring
[NASA-CASE-HQN-10844-1] c36 N75-19653
- OPTICAL SCANNERS**
- Optical scanner mounted on rotating support structure with method of compensating for image or satellite rotation
[NASA-CASE-XGS-02401] c14 N69-27485
- Optical apparatus for visual detection of roundness and regularity of cone surfaces
[NASA-CASE-XNF-00462] c14 N70-34298
- Electro-optical system with scan-in illuminator and scan-out photosensor for scanning variable transmittance objects
[NASA-CASE-NFO-11106] c14 N70-34697
- Multi-lobar scan horizon sensor
[NASA-CASE-XGS-00809] c21 N70-35427
- Optical scanner with linear housing and rotating camera
[NASA-CASE-NFO-11002] c14 N72-22441
- Spacecraft attitude sensing system design with narrow field of view sensor rotating about spacecraft x-y axis
[NASA-CASE-GSC-10890-1] c21 N73-30640
- Optical instruments
[NASA-CASE-MSC-14096-1] c74 N74-15095
- Dual digital video switcher
[NASA-CASE-KSC-10782-1] c33 N75-30431
- Traffic survey system --- using optical scanners
[NASA-CASE-MFS-22631-1] c66 N76-19888
- Optical scanner
[NASA-CASE-LAR-11711-1] c74 N76-23985
- OPTICAL TRACKING**
- Sun tracker with rotatable plane-parallel plate and two photocells
[NASA-CASE-XGS-01159] c21 N71-10678
- Optical tracker with pair of PM reticles having patterns 90 deg out of phase
[NASA-CASE-XGS-05715] c23 N71-16100
- Tracking mount for laser telescope employed in tracking large rockets and space vehicles to give information regarding azimuth and elevation
[NASA-CASE-MFS-14017] c14 N71-26627
- OPTICAL TRANSFER FUNCTION**
- Electronic optical transfer function analyzer
[NASA-CASE-MFS-21672-1] c74 N76-19935
- OPTIMIZATION**
- Power point tracker for maintaining optimal output voltage of power source
[NASA-CASE-GSC-10376-1] c14 N71-27407
- ORBITAL MECHANICS**
- Design and development of space shuttle system for delivering payload to earth orbit or celestial orbit
[NASA-CASE-MSC-12391] c30 N73-12884
- ORBITAL SPACE STATIONS**
- Radial module manned space station with artificial gravity environment
[NASA-CASE-XMS-01906] c31 N70-41373
- Internal and external serpentine devices for performing physical operations around orbital space stations
[NASA-CASE-XNF-05344] c31 N71-16345
- Describing apparatus for manufacturing operations in low and zero gravity environments of orbital space flight
[NASA-CASE-MFS-20410] c15 N71-19214
- ORGANIC CHEMISTRY**
- Process for interfacial polymerization of pyromellitic dianhydride and tetraamino benzene
[NASA-CASE-XIA-03104] c06 N71-11235
- Amino acid analysis
[NASA-CASE-NFO-12130-1] c25 N75-14844
- ORGANIC COMPOUNDS**
- Synthesis of high purity dianilinosilanes
[NASA-CASE-XNF-06409] c06 N71-23230
- Preparation of dicyanoacetylene and vinylidene copolymers using organic compounds
[NASA-CASE-XNP-03250] c06 N71-23500
- Infusible polymer production from reaction of polyfunctional epoxy resins with polyfunctional aziridine compounds
[NASA-CASE-NFO-10701] c06 N71-28620
- Composition of diffuse reflective coating containing sodium chloride in combination with diol solvent and organic wetting and drying agents
[NASA-CASE-GSC-11214-1] c06 N73-13128
- Automated system for identifying traces of organic chemical compounds in aqueous solutions
[NASA-CASE-NFO-13063-1] c25 N76-18245
- Analysis of volatile organic compounds --- trace amounts of organic volatiles in gas samples
[NASA-CASE-MSC-14428-1] c23 N77-17167
- Preparation of dielectric coatings of variable dielectric constant by plasma polymerization
[NASA-CASE-ARC-10892-2] c27 N77-17245
- ORGANIC LIQUIDS**
- Inorganic-organic battery separator for alkaline batteries
[NASA-CASE-LFW-12649-1] c44 N76-31674
- ORGANIC SILICON COMPOUNDS**
- Oxygen post-treatment of plastic surfaces coated with plasma polymerized silicon-containing monomers
[NASA-CASE-ARC-10915-2] c27 N77-20256
- ORGANOMETALLIC COMPOUNDS**
- Ammonium perchlorate composite propellant with organic Cu/II/ chelate catalytic additive
[NASA-CASE-LAR-10173-1] c27 N71-14090
- Organometallic compounds of niobium and tantalum useful for film deposition
[NASA-CASE-XNP-04023] c06 N71-28808
- ORGANOMETALLIC POLYMERS**
- Chemical synthesis of thermally stable organometallic polymers with divalent metal ion and tetraphenylphosphonitrilic units
[NASA-CASE-HQN-10364] c06 N71-27363
- Thiophenyl ether disiloxanes and trisiloxanes useful as lubricant fluids
[NASA-CASE-MFS-22411-1] c37 N74-21058
- ORGANS**
- A miniature implantable ultrasonic echosonometer
[NASA-CASE-ARC-11035-1] c52 N77-15621
- ORIFICE FLOW**
- Relief valve to permit slow and fast bleeding rates at difference pressure levels
[NASA-CASE-XMS-05894-1] c15 N69-21924
- ORIFICES**
- Rocket engine injector orifice to accommodate changes in density, velocity, and pressure, thereby maintaining constant mass flow rate of propellant into rocket combustion chamber
[NASA-CASE-XLE-03157] c28 N71-24736
- ORTHOGONAL MULTIPLEXING THEORY**
- Encoders designed to generate comma free biorthogonal Reed-Muller type code comprising conversion of 64 6-bit words into 64 32-bit data for communication purposes
[NASA-CASE-NFO-10595] c10 N71-25917
- ORTHOGONALITY**
- Device for measuring two orthogonal components of force with gallium flotation of measuring target for use in vacuum environments
[NASA-CASE-XAC-04885] c14 N71-23790
- ORTHOPEDICS**
- Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-1] c54 N76-22914
- Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-2] c52 N77-27694
- ORTHOTROPIC CYLINDERS**
- Method for shaping regeneratively cooled rocket motor casing having minimum thickness at each channel cross section
[NASA-CASE-XLE-00409] c28 N71-15658
- Regeneratively cooled rocket motor casing with tapered channels to insure minimum thicknesses at each channel cross section for necessary strength requirements
[NASA-CASE-XLE-05689] c28 N71-15659
- OSCILLATION DAMPERS**
- Design and operation of viscous pendulum damper

[NASA-CASE-XIA-02079] c12 N71-16894
 Stabilization system for gravity-oriented
 satellites using single damper rod
 [NASA-CASE-XAC-01591] c31 N71-17729
 Suspended mass oscillation damper based on
 impact energy absorption for damping wind
 induced oscillations of tall stacks, antennas,
 and unbilical towers
 [NASA-CASE-IAR-10193-1] c15 N71-27146
 Damper system for alleviating air flow shock
 loads on wind tunnel models
 [NASA-CASE-XIA-09480] c11 N71-33612

OSCILLATIONS
 Development of electrical circuit for
 suppressing oscillations across inductor
 operating in resonant mode
 [NASA-CASE-EBC-10403-1] c10 N73-26228

OSCILLATORS
 Oscillatory electromagnetic mirror drive system
 for horizon scanners
 [NASA-CASE-XIA-03724] c14 N69-27461
 Frequency control network for current feedback
 oscillators converting dc voltage to ac or
 higher dc voltages
 [NASA-CASE-GSC-10041-1] c10 N71-19418
 Development and characteristics of oscillating
 static inverter
 [NASA-CASE-XGS-05289] c09 N71-19470
 Voltage controlled oscillators and pulse
 amplitude modulation for signal ratio system
 [NASA-CASE-XMP-04367] c09 N71-23545
 Development and characteristics of fluid
 oscillator analog to digital converter with
 variable frequency controlled by signal
 passing through conditioning circuit
 [NASA-CASE-LEW-10345-1] c10 N71-25899
 Wideband voltage controlled oscillator with high
 phase stability
 [NASA-CASE-XIA-03893] c10 N71-27271
 Variable frequency subcarrier oscillator with
 temperature compensation
 [NASA-CASE-XNP-03916] c09 N71-28810
 Inverter oscillator with voltage feedback
 [NASA-CASE-NFO-10760] c09 N72-25254
 Controlled oscillator system with a time
 dependent output frequency
 [NASA-CASE-NFO-11962-1] c33 N74-10194
 Ultra-stable oscillator with complementary
 transistors
 [NASA-CASE-GSC-11513-1] c33 N74-20862
 LC-oscillator with automatic stabilized
 amplitude via bias current control --- power
 supply circuit for transducers
 [NASA-CASE-NFS-21698-1] c33 N74-26732
 Frequency modulated oscillator
 [NASA-CASE-NFS-23181-1] c33 N77-17351
 Distributed feedback acoustic surface wave
 oscillator
 [NASA-CASE-NFO-13673-1] c71 N77-26919

OSCILLOSCOPES
 Sign wave generation simulator for variable
 amplitude, frequency, damping, and phase
 pulses for oscilloscope display
 [NASA-CASE-NFO-10251] c10 N71-27365
 Scan oscilloscope for mapping surface
 sensitivity of photomultiplier tube
 [NASA-CASE-LAR-10320-1] c09 N72-23172
 Mechanical exposure interlock device for
 preventing film overexposure in oscilloscope
 camera
 [NASA-CASE-LAR-10319-1] c14 N73-32322
 X-Y alphanumeric character generator for
 oscilloscopes
 [NASA-CASE-GSC-11582-1] c33 N75-19517

OUTER PLANETS EXPLORERS
 Spectrometer integrated with a facsimile camera
 [NASA-CASE-LAR-11207-1] c35 N75-19613

OUTGASSING
 Optical characteristics measuring apparatus
 [NASA-CASE-XNP-08840] c23 N71-16365
 Helium outgassing process for fused glass
 coating on ion accelerator grid
 [NASA-CASE-LEW-10278-1] c15 N71-28582
 Fluid polydimethylsiloxane resin with low
 outgassing properties in cured state
 [NASA-CASE-GSC-11358-1] c06 N73-26100

OUTPUT
 Nonlinear nonsingular feedback shift registers
 [NASA-CASE-NFO-13451-1] c33 N76-14373

Ovens

Oven for heat treating heat shields
 [NASA-CASE-XMS-04318] c15 N69-27871

OVERVOLTAGE

Spark gap type protective circuit for fast
 sensing and removal of overvoltage conditions
 [NASA-CASE-XAC-08981] c09 N69-39897
 Sensing circuit for instantaneous reaction to
 power overloads
 [NASA-CASE-GSC-10667-1] c10 N71-33129
 Overvoltage protection network
 [NASA-CASE-ABC-10197-1] c33 N74-17929
 Overload protection system for power inverter
 [NASA-CASE-NFO-13872-1] c33 N77-17359

OXIDATION

Silicide coating process and composition for
 protection of refractory metals from oxidation
 [NASA-CASE-XLE-10910] c18 N71-29040
 Automated analysis of oxidative metabolites
 [NASA-CASE-ABC-10469-1] c25 N75-12086
 A process of forming catalytic surfaces for
 oxidation reactions
 [NASA-CASE-HSC-14831-1] c25 N76-23387
 Hydrogen rich gas generator
 [NASA-CASE-NFO-13464-2] c44 N76-29704

OXIDATION RESISTANCE

Wickel base alloy with resistance to oxidation
 at high temperatures and superior
 stress-rupture properties
 [NASA-CASE-XLE-02082] c17 N71-16026
 Method of protecting the surface of a substrate
 --- by applying aluminide coating
 [NASA-CASE-LEW-11696-1] c37 N75-13261
 Duplex aluminized coatings
 [NASA-CASE-LEW-11696-2] c26 N75-19408
 High temperature resistant cermet and ceramic
 compositions --- for use in thermionic
 converters or diodes
 [NASA-CASE-NFO-13690-1] c27 N76-13294
 High temperature oxidation resistant cermet
 compositions
 [NASA-CASE-NFO-13666-1] c27 N77-13217

Oxide Films

Stainless steel panel for selective absorption
 of solar energy and the method of producing
 said panel
 [NASA-CASE-NFS-23518-2] c44 N77-31611

Oxides

Utilization of lithium p-lithiphenoxide to
 prepare star polymers
 [NASA-CASE-NFO-10998-1] c06 N73-32029

Oxidizers

Electrolytically regenerative hydrogen-oxygen
 fuel cells
 [NASA-CASE-XLE-04526] c03 N71-11052
 Fuel and oxidizer injection head for thrust
 chamber of reaction engine
 [NASA-CASE-NFO-10046] c28 N72-17843

Oximetry

Ear oximeter for monitoring blood oxygenation
 and pressure, pulse rate, and pressure pulse
 curve, using dc and ac amplifiers
 [NASA-CASE-XAC-05422] c04 N71-23185

Oxygen

Analytical test apparatus and method for
 determining oxygen content in alkali liquid
 metal
 [NASA-CASE-XLE-01997] c06 N71-23527
 Heated tungsten filter for removing oxygen
 impurities from cesium
 [NASA-CASE-XNP-04262-2] c17 N71-26773
 Method for detecting oxygen in gas by
 thermoluminescence
 [NASA-CASE-LAR-10668-1] c06 N73-16106
 Method for obtaining oxygen from lunar or
 similar soil
 [NASA-CASE-HSC-12408-1] c46 N74-13011
 Nonflammable coating compositions --- for use in
 high oxygen environments
 [NASA-CASE-NFS-20486-2] c27 N74-17283

Oxygen Consumption

Respiration analyzing method and apparatus for
 determining subjects oxygen consumption in
 aerospace environments
 [NASA-CASE-IFR-08403] c05 N71-11202

Oxygen Fluorides

Utilization of oxygen difluoride for syntheses
 of fluoropolymers
 [NASA-CASE-NFO-12061-1] c27 N76-16228

OXYGEN METABOLISM

Metabolic analyzer --- for measuring metabolic rate and breathing dynamics of human beings
[NASA-CASE-MFS-21415-1] c52 N74-20728

OXYGEN PLASMA

Oxygen post-treatment of plastic surfaces coated with plasma polymerized siliccn-containing monomers
[NASA-CASE-ARC-10915-2] c27 N77-20256

OXYGEN REGULATORS

Lead-oxygen dc power supply system having a closed loop oxygen and water system
[NASA-CASE-MFS-23059-1] c44 N76-27664

OXYGEN SUPPLY EQUIPMENT

Gas compression analysis --- for oxygen supply equipment
[NASA-CASE-MSC-14757-1] c37 N76-13496
Self-contained breathing apparatus
[NASA-CASE-MSC-14733-1] c54 N76-24900

P

P-N JUNCTIONS

Lithium drifted silicon radiation detector with gold rectifying contacts
[NASA-CASE-XLE-10529] c14 N69-23191
Semiconductor p-n junction on needle apex to provide stress and strain sensor
[NASA-CASE-XLA-04980] c09 N69-27422
Improving radiation resistance of silicon semiconductor junctions by doping with lithium
[NASA-CASE-XGS-07801] c09 N71-12513
Silicon radiation detecting probe design for in vivo biomedical use
[NASA-CASE-XMS-01177] c05 N71-19440
Electrode connection for n-on-p siliccn solar cell
[NASA-CASE-XLE-04787] c03 N71-20492
Water content in vapor deposition atmosphere for forming n-type and p-type junctions of zinc doped gallium arsenide
[NASA-CASE-XNP-01961] c26 N71-29156
Method for making semiconductor p-n junction stress and strain sensor
[NASA-CASE-XLA-04980-2] c14 N72-28438
Resin for protecting p-n semiconductor junction surface
[NASA-CASE-ERC-10339-1] c18 N73-30532

P-TYPE SEMICONDUCTORS

Addition of group 3 elements to silicon semiconductor material for increased resistance to radiation damage in solar cells
[NASA-CASE-XLE-02798] c26 N71-23654
Integrated P-channel MOS gyrator
[NASA-CASE-MFS-22343-1] c33 N74-34638

PACKAGES

Impact testing machine for imparting large impact forces on high velocity packages
[NASA-CASE-XNP-04817] c14 N71-23225
One hand backpack harness
[NASA-CASE-LAR-10102-1] c05 N72-23085

PACKAGING

Characteristics of device for folding thin flexible sheets into compact configuration
[NASA-CASE-XLA-00137] c15 N70-33180
Method of compactly packaging centrifugally expandable lightweight flexible reflector satellite
[NASA-CASE-XLA-00138] c31 N70-37981
Development and characteristics of system for skin packaging articles using thermoplastic film heating and vacuum operated equipment
[NASA-CASE-MFS-20855] c15 N73-27405

PACKING DENSITY

Micropacked column for rapid chromatographic analysis using low gas flow rates
[NASA-CASE-XNP-04816] c06 N69-39936

PACKINGS (SEALS)

Fluid seal for rotating shafts
[NASA-CASE-LEW-11676-1] c37 N76-22541

PAD

Lubricated journal bearing
[NASA-CASE-LEW-11076-3] c37 N75-30562

PAINTS

Nitroaniline sulfate, intumescent paints
[NASA-CASE-ABC-10099-1] c18 N71-15469
Composition and production method of alkali metal silicate paint with ultraviolet reflection properties
[NASA-CASE-XGS-04799] c18 N71-24183

White paint production by heating impure aluminum silicate clay having low solar absorptance
[NASA-CASE-XNP-02139] c18 N71-24184

PALLADIUM COMPOUNDS

Preventing pressure buildup in electrochemical cells by reacting palladium oxide with evolved hydrogen
[NASA-CASE-XGS-01419] c03 N70-41864
Separation of dissolved hydrogen from water and coating with palladium black
[NASA-CASE-MSC-13335-1] c06 N72-31140

PANELS

Nut and bolt fastener permitting all-directional movement of skin sections with respect to supporting structure
[NASA-CASE-XLA-01807] c15 N71-10799
Multilayer insulation panels for cryogenic liquid containers
[NASA-CASE-MFS-14023] c33 N71-25351
Method and apparatus for fabricating solar cell panels
[NASA-CASE-XNP-03413] c03 N71-26726
Method for making pressurized meteoroid penetration detector panels
[NASA-CASE-XLA-08916] c15 N71-29018
Honeycomb panels of minimal surface, periodic tubule layers
[NASA-CASE-ERC-10364] c18 N72-25540
Fabrication of light weight panel structure using pairs of elongate hollow ribs of semicircular configuration
[NASA-CASE-IAR-11052-1] c32 N73-13929
Ultrasonic scanner for radial and flat panels
[NASA-CASE-MFS-20335-1] c35 N74-10415
Folding structure fabricated of rigid panels
[NASA-CASE-XHQ-02146] c18 N75-27040
Varying density composite structure
[NASA-CASE-LAR-11181-1] c39 N75-31479
Composite sandwich lattice structure
[NASA-CASE-LAR-11898-1] c24 N77-15103

PAPERS

Process for purification of waste water produced by a Kraft process pulp and paper mill
[NASA-CASE-NPO-13847-2] c85 N77-17949
Guide for a typewriter
[NASA-CASE-MFS-15218-1] c37 N77-19457

PARABOLIC ANTENNAS

Device for improving efficiency of parabolic horn antenna system for linearly polarized signals
[NASA-CASE-XNP-00611] c09 N70-35219
Drive system for parabolic tracking antenna with reversible motion and minimal backlash
[NASA-CASE-NFO-10173] c15 N71-24696
Switchable beamwidth monopulse method and system
[NASA-CASE-GSC-11924-1] c33 N76-27472

PARABOLIC REFLECTORS

Device for improving efficiency of parabolic reflector horn for linearly or circularly polarized waves
[NASA-CASE-XNP-00540] c09 N70-35382
Foldable, double cone and parabolic reflector system for solar ray concentration
[NASA-CASE-XLA-04622] c03 N70-41580
Self erecting parabolic reflector design for use in space
[NASA-CASE-XMS-03454] c09 N71-20658
Plural beam antenna with parabolic reflectors
[NASA-CASE-GSC-11013-1] c09 N73-19234
Multimode antenna feed system for microwave and broadband communication
[NASA-CASE-GSC-11046-1] c07 N73-28013
Single frequency, two feed dish antenna having switchable beamwidth
[NASA-CASE-GSC-11968-1] c32 N76-15329
Sun tracking solar energy collector
[NASA-CASE-NPO-13921-1] c44 N77-24590

PARABOLOID MIRRORS

Optical data processing system using paraboloidal reflecting surfaces
[NASA-CASE-GSC-11296-1] c23 N73-30666
Three mirror glancing incidence system for X-ray telescope
[NASA-CASE-MFS-21372-1] c74 N74-27866

PARACHUTE DESCENT

Multiple parachute system for landing control of Apollo type spacecraft
[NASA-CASE-XLA-00898] c02 N70-36804

SUBJECT INDEX

PASSIVE SATELLITES

- Parachute system for lowering manned spacecraft from post-reentry to ocean landing
[NASA-CASE-XLA-00195] c02 N70-38009
- Piston in bore cutter for severing parachute control lines and sealing cable hole to prevent water leakage into load
[NASA-CASE-XMS-04072] c15 N70-42017
- Development and operating principles of gas generator for deploying recovery parachutes from space capsules during atmospheric entry
[NASA-CASE-LAR-10549-1] c31 N73-13898
- PARACHUTE FABRICS**
Lightweight, variable solidity knitted parachute fabric --- for aerodynamic decelerators
[NASA-CASE-LAR-10776-1] c02 N74-10034
- PARACHUTES**
System for controlling torque buildup in suspension of gondola connected to balloon by parachute shroud lines
[NASA-CASE-GSC-11077-1] c02 N73-13008
Deploy/release system --- model aircraft flight control
[NASA-CASE-LAR-11575-1] c02 N76-16014
- PARAGLIDERS**
Multiple parachute system for landing control of Apollo type spacecraft
[NASA-CASE-XLA-00898] c02 N70-36804
- PARALLAX**
Projection system for display of parallax and perspective
[NASA-CASE-MFS-23194-1] c74 N76-13909
- PARALLEL PLATES**
Describing instrument capable of measuring true shear viscosity of liquids and viscoelastic materials
[NASA-CASE-XNP-09462] c14 N71-17584
- PARALLEL PROCESSING (COMPUTERS)**
Digital data reformatter/deserializer
[NASA-CASE-NFO-13676-1] c60 N77-24781
- PARAMETRIC AMPLIFIERS**
Development of idler feedback system to reduce electronic noise problem in two parametric amplifiers
[NASA-CASE-LAR-10253-1] c09 N72-25258
Millimeter wave pumped parametric amplifier
[NASA-CASE-GSC-11617-1] c33 N74-32660
- PARAWINGS**
Method for deployment of flexible wing glider from space vehicle with minimum impact and loading
[NASA-CASE-XMS-00907] c02 N70-41630
- PARKING**
Automated multi-level vehicle parking system
[NASA-CASE-NFO-13058-1] c37 N77-22480
- PARTIAL PRESSURE**
Equipment for measuring partial water vapor pressure in gas tank
[NASA-CASE-XMS-01618] c14 N71-20741
- PARTICLE ACCELERATION**
Selector mechanism for mechanical separation and discrimination of high velocity molecular particles
[NASA-CASE-XLF-01533] c11 N71-10777
Method and apparatus for use in forming highly collimated beam of microparticles with high charge to mass ratio and injecting beam into electrostatic accelerating tube
[NASA-CASE-XGS-06628] c24 N71-16213
- PARTICLE ACCELERATOR TARGETS**
Dispensing targets for ion beam particle generators
[NASA-CASE-NFO-13112-1] c73 N74-26767
Deuterium pass through target --- neutron emitting target
[NASA-CASE-LFW-11866-1] c72 N76-15860
Closed loop spray cooling apparatus --- for particle accelerator targets
[NASA-CASE-LFW-11981-1] c37 N76-20486
Closed loop spray cooling apparatus
[NASA-CASE-LFW-11981-2] c34 N77-32434
- PARTICLE BEAMS**
Particle beam power density detection and measurement apparatus
[NASA-CASE-XLF-00243] c14 N70-38602
Doppler shift system --- system for measuring velocities of radiating particles
[NASA-CASE-BQN-10740-1] c72 N74-19310
- PARTICLE COLLISIONS**
Momentum-velocity analyzer for measuring minute space particles
[NASA-CASE-XMS-04201] c14 N71-22990
- PARTICLE DENSITY (CONCENTRATION)**
Particle detector for measuring micrometeoroid velocity in space
[NASA-CASE-XLA-00495] c14 N70-41332
- PARTICLE EMISSION**
Mosaic semiconductor radiation detector and position indicator systems engineering for low energy particles
[NASA-CASE-XGS-03230] c14 N71-23401
Apparatus for detecting particle emission lower than noise level of multiplier tube
[NASA-CASE-XLA-07813] c14 N72-17328
- PARTICLE ENERGY**
Particle detector for indicating incidence and energy of minute space particles
[NASA-CASE-XLA-00135] c14 N70-33322
Particulate and aerosol detector
[NASA-CASE-LAR-11434-1] c35 N76-22509
- PARTICLE MASS**
Cosmic dust analyzer
[NASA-CASE-MSC-13802-2] c35 N76-15431
- PARTICLE MOTION**
Moving particle composition analyzer
[NASA-CASE-GSC-11889-1] c35 N76-16393
- PARTICLE PRODUCTION**
Production of I-123
[NASA-CASE-LEW-11390-3] c25 N76-29379
- PARTICLE SIZE DISTRIBUTION**
Micropacked column for rapid chromatographic analysis using low gas flow rates
[NASA-CASE-XNP-04816] c06 N69-39936
Apparatus for producing hydrocarbon slurry containing small particles of magnesium for use as jet aircraft fuel
[NASA-CASE-XLE-00010] c15 N70-33382
Production of high strength refractory compounds and microconstituents into refractory metal matrix
[NASA-CASE-XLF-03940] c18 N71-26153
Frequency scanning particle size spectrometer
[NASA-CASE-NPO-13606-1] c35 N75-19627
Particle size spectrometer and refractometer
[NASA-CASE-NPO-13614-1] c35 N75-19628
Grain refinement control in TIG arc welding
[NASA-CASE-MSC-19095-1] c37 N75-19683
Forward-scatter polarimeter for determining the gaseous depolarization factor in the presence of polluting polydispersed particles
[NASA-CASE-NPO-13756-1] c35 N76-14434
- PARTICLE TRAJECTORIES**
Micrometeoroid velocity and trajectory analyzer
[NASA-CASE-GSC-11892-1] c35 N76-15433
- PARTICLES**
Development of device for separating, collecting, and viewing soil particles
[NASA-CASE-XNP-09770] c15 N71-20440
Development of apparatus for producing metal powder particles of controlled size
[NASA-CASE-XLE-06461-2] c17 N72-28535
- PARTICULATE SAMPLING**
Design and development of device to prevent clogging in hoppers containing particulate materials
[NASA-CASE-LAR-10961-1] c15 N73-12496
Development and operation of apparatus for sampling particulates in gases in upper atmosphere
[NASA-CASE-BQN-10037-1] c14 N73-27376
Fine particulate capture device
[NASA-CASE-LEW-11583-1] c37 N74-13199
Electrophoretic sample insertion --- device for uniformly distributing samples in flow path
[NASA-CASE-MFS-21395-1] c25 N74-26948
Sampler of gas borne particles
[NASA-CASE-NPO-13396-1] c35 N76-18801
- PASSAGEWAYS**
Space expandable tether device for use as passageway between two docked spacecraft
[NASA-CASE-XMS-10993] c15 N71-28936
- PASSIVE SATELLITES**
Rectable, inflatable, radio signal reflecting passive communication satellite
[NASA-CASE-XLA-00210] c30 N70-40309
Apparatus for measuring backscatter and transmission characteristics of sample segment of large spherical passive satellites
[NASA-CASE-XGS-02608] c07 N70-41678

PATENT APPLICATIONS

SUBJECT INDEX

Forming inflatable panels erectable in space for passive communication satellite
[NASA-CASE-XLA-03497] c15 N71-23052

PATENT APPLICATIONS
Auxiliary power system for activity cooled aircraft
[NASA-CASE-LAR-11626-1] c34 N77-12332

PATENTS
Solar-powered pump
[NASA-CASE-NFO-13567-1] c44 N76-29701

PATENTS
Stretcher with rigid head and neck support with capability of supporting immobilized person in vertical position for removal from vehicle hatch to exterior also useful as splint stretcher
[NASA-CASE-XMF-06589] c05 N71-23159

PATENT RECOGNITION
Roughness detector for recording surface pattern of irregularities
[NASA-CASE-XLA-00203] c14 N70-34161
Auditory display for the blind
[NASA-CASE-HQN-10832-1] c71 N74-21014

PAYLOADS
Plastic foam generator for space vehicle instrument payload package flotation in water landing
[NASA-CASE-XLA-00838] c03 N70-36778
Stage separation system for spinning vehicles and payloads
[NASA-CASE-XLA-02132] c31 N71-10582
Payload/spent rocket engine case separation system
[NASA-CASE-XLA-05369] c31 N71-15687
High velocity guidance and spin stabilization gyro controlled jet reaction system for launch vehicle payloads
[NASA-CASE-XLA-01339] c31 N71-15692
Payload soft landing system using stowable gas bag
[NASA-CASE-XLA-09881] c31 N71-16085
Zero gravity apparatus utilizing pneumatic decelerating means to create payload subjected to zero gravity conditions by dropping its height
[NASA-CASE-XMF-06515] c14 N71-23227

PCM TELEMETRY
Variable time constant, wide frequency range smoothing network for noise removal from pulse chains
[NASA-CASE-XGS-01983] c10 N70-41964
Data acquisition and processing system with buffer storage and timing device for magnetic tape recording of PCM data and timing information
[NASA-CASE-NFO-12107] c08 N71-27255
High speed direct binary to binary coded decimal converter for use in PCM telemetry systems
[NASA-CASE-KSC-10326] c08 N72-21197

PELLETS
Supporting structure for simultaneous exposure of pellets to X rays
[NASA-CASE-XMF-06031] c15 N71-15606

PELTIER EFFECTS
Use of silicon controlled rectifier shorting circuit to protect thermoelectric generator source from thermal destruction
[NASA-CASE-XGS-04808] c03 N69-25146

PENETRANTS
Dye penetrant and technique for nondestructive tests of solid surfaces contacted by liquid oxygen
[NASA-CASE-XMF-02221] c18 N71-27170

PENETRATION
Method and device for detection of surface discontinuities or defects
[NASA-CASE-MSC-14187-1] c35 N74-32879

PENETROMETERS
Development and characteristics of penetrometer for measuring physical properties of lunar surface
[NASA-CASE-XLA-00934] c14 N71-22765
Portable penetrometer for analyzing soil characteristics
[NASA-CASE-NFS-20774] c14 N73-19420
Auger-type soil penetrometer for burrowing into soil formations
[NASA-CASE-XMF-05530] c14 N73-32321
Penetrometer --- for determining load bearing characteristics of inclined surfaces
[NASA-CASE-NFO-11103-1] c35 N77-27367

PERCEPTION
Measuring method for cutaneous perception using instrument with elongated tubular housing
[NASA-CASE-MSC-13609-1] c05 N72-25122

PERFLUORO COMPOUNDS
Chemical synthesis of hydroxy terminated perfluoro ethers as intermediates for highly fluorinated polyurethane resins
[NASA-CASE-NFO-10768] c06 N71-27254
Perfluoro polyether acyl fluorides
[NASA-CASE-NFO-10765] c06 N72-20121
Reaction of polyperfluoropolyenes with fluorine to produce saturated polymer chain or create reactive sites on chain
[NASA-CASE-NFO-10862] c06 N72-22107
Silphenylenesiloxane polymer with in-chain perfluoroalkyl groups
[NASA-CASE-NFS-20979] c06 N72-25151
Polymerization of perfluorobutadiene
[NASA-CASE-NFO-10863-2] c06 N72-25152
Formation of polyurethane resins from hydroxy terminated perfluoro ethers
[NASA-CASE-NFO-10768-2] c06 N72-27144
Process for preparing disilanol with in-chain perfluoroalkyl groups
[NASA-CASE-NFS-20979-2] c06 N73-32030
Perfluoro alkylene dioxy-bis-(4-phthalic anhydrides and oxy-bis-(perfluoroalkyleneoxyphthalic anhydrides
[NASA-CASE-NFS-22356-1] c23 N75-30256

PERFORATED PLATES
Helium outgassing process for fused glass coating on ion accelerator grid
[NASA-CASE-LEW-10278-1] c15 N71-28582

PERFORATED SHELLS
Method of fabricating an article with cavities --- with thin bottom walls
[NASA-CASE-LAR-10318-1] c31 N74-18089

PERFORMANCE
Thermocouples of molybdenum and iridium alloys for more stable vacuum-high temperature performance
[NASA-CASE-LEW-12174-1] c35 N76-19407

PERFORMANCE PREDICTION
Failure detection and control means for improved drift performance of a gimballed platform system
[NASA-CASE-NFS-23551-1] c04 N76-26175

PERFORMANCE TESTS
Flexible, frangible electrochemical cell and package for operation in low temperature environment
[NASA-CASE-XGS-10010] c03 N72-15986
Test method and equipment for identifying faulty cells or connections in solar cell assemblies
[NASA-CASE-NFO-10401] c03 N72-20033
Development of apparatus for detonating explosive devices in order to determine forces generated and detonation propagation rate
[NASA-CASE-LAR-10800-1] c33 N72-27959
Safety flywheel
[NASA-CASE-HQN-10888-1] c37 N77-22484

PERIODIC VARIATIONS
Mount for continuously orienting a collector dish in a system adapted to perform both diurnal and seasonal solar tracking
[NASA-CASE-NFS-23267-1] c35 N77-20401

PERMEABILITY
Water insoluble, cationic permselective membrane
[NASA-CASE-NFO-11091] c18 N72-22567

PERMITTIVITY
Preparation of dielectric coatings of variable dielectric constant by plasma polymerization
[NASA-CASE-ARC-10892-2] c27 N77-17245

PEROXIDES
Low pressure perfluorobutadiene polymerization with peroxide catalysts
[NASA-CASE-NFO-10447] c06 N70-11252

PERSPIRATION
Manufacturing process for making perspiration resistant-stress resistant biopotential electrode
[NASA-CASE-MSC-90153-2] c05 N72-25120

PERTURBATION
Absorbing gas reactivity control system for minimizing power distribution and perturbation in nuclear reactors
[NASA-CASE-XLE-04599] c22 N72-20597

PERTURBATION THEORY

Dual wavelength scanning Doppler velocimeter ---
without perturbation of flow fields
[NASA-CASE-ARC-10637-1] c35 N75-16783

PHASE COHERENCE

Apparatus for estimating amplitude and sign of
phase difference or time lag between two signals
[NASA-CASE-NPO-11203] c10 N72-20224
Coherent receiver employing nonlinear coherence
detection for carrier tracking
[NASA-CASE-NPO-11921-1] c32 N74-30523

PHASE CONTROL

System designed to reduce time required for
obtaining synchronization in data
communication with spacecraft utilizing
pseudonoise codes
[NASA-CASE-NPO-10214] c10 N71-26577
Wideband voltage controlled oscillator with high
phase stability
[NASA-CASE-XLA-03893] c10 N71-27271
Voltage controlled oscillator circuit for
two-phase induction motor control
[NASA-CASE-MFS-21465-1] c10 N73-32145
System for generating timing and control signals
[NASA-CASE-NPO-13125-1] c33 N75-19519

PHASE DEMODULATORS

Development of phase demodulation system with
two phase locked loops
[NASA-CASE-XNP-00777] c10 N71-19469
Receiving and tracking phase modulated signals
[NASA-CASE-MSC-16170-1] c32 N77-12248
Linear phase demodulator including a phase
locked loop with auxiliary feedback loop
[NASA-CASE-GSC-12018-1] c33 N77-14334

PHASE DETECTORS

Detector assembly for discriminating first
signal with respect to presence or absence of
second signal at time of occurrence of first
signal
[NASA-CASE-XNP-00701] c09 N70-40272
Bipolar phase detector and corrector for split
phase PCM data signals
[NASA-CASE-XGS-01590] c07 N71-12392
High speed phase detector design indicating
phase relationship between two square wave
input signals
[NASA-CASE-XNP-01306-2] c09 N71-24596
Phase protection system for ac power lines
[NASA-CASE-MSC-17832-1] c33 N74-14956
Low distortion automatic phase control circuit
--- voltage controlled phase shifter
[NASA-CASE-MFS-21671-1] c33 N74-22885
Correlation type phase detector --- with time
correlation integrator for frequency
multiplexed signals
[NASA-CASE-GSC-11744-1] c33 N75-26243
Impact position detector for outer space particles
[NASA-CASE-GSC-11829-1] c35 N75-27331
Frequency discriminator and phase detector circuit
[NASA-CASE-NPO-11515-1] c33 N77-13315
Phase substitution of spare converter for a
failed one of parallel phase staggered
converters
[NASA-CASE-NPO-13812-1] c33 N77-30365

PHASE DEVIATION

System for stabilizing cable phase delay
utilizing a coaxial cable under pressure
[NASA-CASE-NPO-13138-1] c33 N74-17927

PHASE LOCK DEMODULATORS

Phase locked demodulator with bandwidth
switching amplifier circuit
[NASA-CASE-XNP-01107] c10 N71-28859

PHASE LOCKED SYSTEMS

System for phase locking onto carrier frequency
signal located within receiver bandpass
[NASA-CASE-XGS-04994] c09 N69-21543
Phase locked loop with sideband rejecting
properties in continuous wave tracking radar
[NASA-CASE-XNP-02723] c07 N70-41680
Development of automatic frequency
discriminators and control for phase lock loop
providing frequency preset capabilities
[NASA-CASE-XNI-08665] c10 N71-19467
Development and characteristics of burst
synchronization detection system
[NASA-CASE-XNS-05605-1] c10 N71-19468
Development of phase demodulation system with
two phase locked loops
[NASA-CASE-XNP-00777] c10 N71-19469

Diversity receiving system with diversity phase
lock

[NASA-CASE-XGS-01222] c10 N71-20841
Phase locked phase modulation system with
voltage controlled oscillator for final phase
linearity
[NASA-CASE-XNP-05382] c10 N71-23544
Video sync processor with phase locked system
[NASA-CASE-KSC-10002] c10 N71-25865
Characteristics of data-aided carrier tracking
loop used for tracking carrier in angle
modulated communications system
[NASA-CASE-NPO-11282] c10 N73-16205
Filter for third order phase locked loops in
signal receivers
[NASA-CASE-NPO-11941-1] c10 N73-27171
Improved phase lock loop for receiver in
multichannel telemetry system with suppressed
carrier
[NASA-CASE-NPO-11593-1] c07 N73-28012
Automatic carrier acquisition system for phase
locked loop receiver
[NASA-CASE-NPO-11628-1] c07 N73-30113
Phase-locked servo system --- for synchronizing
the rotation of slip ring assembly
[NASA-CASE-MFS-22073-1] c33 N75-13139
Low speed phaselock speed control system --- for
brushless dc motor
[NASA-CASE-GSC-11127-1] c09 N75-24758
Digital phase-locked loop
[NASA-CASE-GSC-11623-1] c33 N75-25040
Telemetry synchronizer
[NASA-CASE-GSC-11868-1] c17 N76-22245
Receiving and tracking phase modulated signals
[NASA-CASE-MSC-16170-1] c32 N77-12248

PHASE MODULATION

Plural channel data transmission system with
quadrature modulation and complementary
demodulation
[NASA-CASE-XAC-06302] c08 N71-19763
Adaptive notch filter, using modulation
techniques for reversed phase noise signal
[NASA-CASE-XNP-01892] c10 N71-22986
Phase locked phase modulation system with
voltage controlled oscillator for final phase
linearity
[NASA-CASE-XNP-05382] c10 N71-23544
Scanning signal phase and amplitude electronic
control device with hybrid T waveguide junction
[NASA-CASE-NPO-10302] c10 N71-26142
Phase modulator with tuned variable length
electrical lines including coupling and
varactor diode circuits
[NASA-CASE-MSC-13201-1] c07 N71-28429
Multicarrier communications system for
transmitting modulated signals from single
transmitter
[NASA-CASE-NPO-11548] c07 N73-26118
Decision feedback loop for tracking a polyphase
modulated carrier
[NASA-CASE-NPO-13103-1] c32 N74-20811
Modulator for tone and binary signals --- phase
of modulation of tone and binary signals on
carrier waves in communication systems
[NASA-CASE-GSC-11743-1] c32 N75-24981
Phase modulating with odd and even finite power
series of a modulating signal
[NASA-CASE-LAR-11607-1] c32 N77-14292
Quadrature demodulation
[NASA-CASE-GSC-12137-1] c32 N77-27272

PHASE SHIFT

Bipolar phase detector and corrector for split
phase PCM data signals
[NASA-CASE-XGS-01590] c07 N71-12392
Left and right hand circular electromagnetic
polarization excitation by phase shifter and
hybrid networks
[NASA-CASE-GSC-10021-1] c09 N71-24595
Pulse code modulated data from frequency
multiplex communications by digital phase
shift or carrier
[NASA-CASE-NPO-11338] c08 N72-25208

PHASE SHIFT CIRCUITS

Design of gyrator circuit using operational
amplifiers to replace ungrounded inductors
[NASA-CASE-XAC-10608-1] c09 N71-12517
Phase shifting circuit for selecting phase of
input signal
[NASA-CASE-ARC-10269-1] c10 N72-16172

Continuously variable, voltage-controlled phase shifter
 [NASA-CASE-NPO-11129] c09 N72-33204
 Voltage controlled oscillator circuit for two-phase induction motor control
 [NASA-CASE-MFS-21465-1] c10 N73-32145
 Low distortion automatic phase control circuit --- voltage controlled phase shifter
 [NASA-CASE-MFS-21671-1] c33 N74-22885
 Traveling wave tube circuit
 [NASA-CASE-LEW-12013-1] c33 N77-17360
PHASE SHIFT KEYING
 Decision feedback loop for tracking a polyphase modulated carrier
 [NASA-CASE-NPO-13103-1] c32 N74-20811
 Differential phase shift keyed communication system
 [NASA-CASE-MSC-14065-1] c32 N74-26654
 Differential phase shift keyed signal resolver
 [NASA-CASE-MSC-14066-1] c33 N74-27705
 Unbalanced quadriphase demodulator
 [NASA-CASE-MSC-14840-1] c32 N77-24331
PHASE SWITCHING INTERFEROMETERS
 Interferometric tuning acquisition and tracking radar antenna system
 [NASA-CASE-XMS-09610] c07 N71-24625
PHASE TRANSFORMATIONS
 Magneto-hydrodynamic generator for mixing nonconductive gas and liquid metal mist to form slugs
 [NASA-CASE-XIE-02083] c03 N69-39983
 Method and feed system for separating and orienting liquid and vapor phases of liquid propellants in zero gravity environment
 [NASA-CASE-XIE-01182] c27 N71-15635
PHASE VELOCITY
 Ultrasonic calibration device --- for producing changes in acoustic attenuation and phase velocity
 [NASA-CASE-LAR-11435-1] c35 N76-15432
PHASED ARRAYS
 Development of phase control coupling for use with phased array antenna
 [NASA-CASE-ERC-10285] c10 N73-16206
 Phase array antenna control
 [NASA-CASE-MSC-14939-1] c33 N77-19320
 Phase conjugation method and apparatus for an active retrodirective antenna array
 [NASA-CASE-NPO-13641-1] c32 N77-24340
PHASED LOCKED SYSTEMS
 Bit synchronization system using digital data transition tracking phased locked loop
 [NASA-CASE-NFO-10844] c07 N72-20140
 Digital second-order phase-locked loop
 [NASA-CASE-NPO-11905-1] c33 N74-12887
 Linear phase demodulator including a phase locked loop with auxiliary feedback loop
 [NASA-CASE-GSC-12018-1] c33 N77-14334
PHENOLIC RESINS
 Bonding method in the manufacture of continuous regression rate sensor devices
 [NASA-CASE-LAR-10337-1] c24 N75-30260
PHENOLS
 Utilization of lithium p-lithiphenoxide to prepare star polymers
 [NASA-CASE-NFO-10998-1] c06 N73-32029
 Device for the detection of phenol and related compounds --- in an electrochemical cell
 [NASA-CASE-LEW-12513-1] c25 N77-18238
PHONOCARDIOGRAPHY
 Phonocardiogram simulator producing electrical voltage waves to control amplitude and duration between simulated sounds
 [NASA-CASE-XKS-10804] c05 N71-24606
 Vibrophonocardiograph comprising low weight and small volume piezoelectric microphone with amplifier having high input impedance for high sensitivity and low frequency response
 [NASA-CASE-IFR-07172] c05 N71-27234
PHOSPHATES
 Low concentration alkaline solution treatment of aluminum with metal phosphate surface coatings to improve chemical bonding and reduce coating weight
 [NASA-CASE-XIA-01995] c18 N71-23047
PHOSPHINES
 Heat resistant polymers of oxidized styrylphosphine
 [NASA-CASE-MSC-14903-1] c27 N76-28425

PHOSPHONITRILES

Chemical synthesis of thermally stable organometallic polymers with divalent metal ion and tetraphenylphosphonitrilic units
 [NASA-CASE-HQN-10364] c06 N71-27363

PHOTOCATHODES

Spectrometer using photoelectric effect to obtain spectral data
 [NASA-CASE-INP-04161] c14 N71-15599
 III-V photocathode with nitrogen doping for increased quantum efficiency
 [NASA-CASE-NFO-12134-1] c33 N76-31409

PHOTOCHEMICAL REACTIONS

Extraction and separation of a preferentially photo-dissociated molecular isotope into positive and negative ions by means of an electric field
 [NASA-CASE-LEW-12465-1] c72 N76-27967
 Process for producing flame resistant polyamides and products produced thereby
 [NASA-CASE-MSC-16074-1] c27 N77-14262
 Apparatus for photon excited catalysis
 [NASA-CASE-NFO-13566-1] c25 N77-32255

PHOTOCONDUCTIVE CELLS

Two-dimensional radiant energy array computers and computing devices
 [NASA-CASE-GSC-11839-1] c60 N77-14751

PHOTOCONDUCTIVITY

Photofabrication techniques for selective removal of conductive metals oxide coatings from nonconductive substrates
 [NASA-CASE-ERC-10108] c06 N72-21094

PHOTOCONDUCTORS

Electronic divider and multiplier for analog electric signals
 [NASA-CASE-IFR-05637] c09 N71-19480

PHOTOELECTRIC CELLS

Sun tracker with rotatable plane-parallel plate and two photocells
 [NASA-CASE-IGS-01159] c21 N71-10678
 Method of and device for determining the characteristics and flux distribution of micrometeorites --- scanning puncture holes in sheet material with photoelectric cell
 [NASA-CASE-NFO-12127-1] c91 N74-13130

PHOTOELECTRIC EFFECT

Spectrometer using photoelectric effect to obtain spectral data
 [NASA-CASE-INP-04161] c14 N71-15599

PHOTOELECTRIC MATERIALS

Light radiation direction indicator with baffle of two parallel grids
 [NASA-CASE-XNP-03930] c14 N69-24331
 Use of thin film light detector
 [NASA-CASE-NFO-11432-2] c35 N74-15090

PHOTOELECTRONS

Photoelectron spectrometer with means for stabilizing sample surface potential
 [NASA-CASE-NFO-13772-1] c35 N76-26450

PHOTOGRAPHIC EQUIPMENT

Camera protecting device for use in photographing rocket engine nozzles or other engine components
 [NASA-CASE-NFO-10174] c14 N71-18465
 Method of treating the surface of a glass member
 [NASA-CASE-GSC-12110-1] c27 N77-32308

PHOTOGRAPHIC FILM

Longitudinal film gate and lock mechanism for securing film in motion picture cameras under vibration and high acceleration loads
 [NASA-CASE-LAR-10686] c14 N71-28935
 Photographic film restoration system using Fourier transformation lenses and spatial filter
 [NASA-CASE-MSC-12448-1] c14 N72-20394
 Mechanical exposure interlock device for preventing film overexposure in oscilloscope camera
 [NASA-CASE-LAR-10319-1] c14 N73-32322
 Optical noise suppression device and method --- laser light exposing film
 [NASA-CASE-MSC-12640-1] c74 N76-31998
 Selective image area control of X-ray film exposure density
 [NASA-CASE-NFO-13808-1] c35 N77-24456
PHOTOGRAPHIC MEASUREMENT
 Photographic method for measuring viscoelastic strain in solid propellants and other materials
 [NASA-CASE-XNP-01153] c32 N71-17645

- Impact measuring technique for determining size of hypervelocity projectiles
[NASA-CASE-LAR-10913] c14 N72-16282
- TV fatigue crack monitoring system
[NASA-CASE-LAR-11490-1] c35 N76-28530
- PHOTOGRAPHIC PROCESSING**
Method of post-process intensification of images on photographic films and plates
[NASA-CASE-MFS-23461-1] c35 N76-26449
Method and apparatus for producing an image from a transparent object
[NASA-CASE-GSC-11989-1] c74 N77-28932
- PHOTOGRAPHIC PROCESSING EQUIPMENT**
Drying chamber for photographic sheet material
[NASA-CASE-GSC-11074-1] c14 N73-28489
- PHOTOGRAPHIC RECORDING**
Photographing surface flow patterns on wind tunnel test models
[NASA-CASE-XLA-01353] c14 N70-41366
Development of focused image holography with extended sources
[NASA-CASE-ERC-10019] c16 N71-15551
Recording and reconstructing focused image holograms
[NASA-CASE-ERC-10017] c16 N71-15567
Method and means for recording and reconstructing holograms without use of reference beam
[NASA-CASE-ERC-10020] c16 N71-26154
Multiple image storing system for obtaining holographic record on film of high speed projectile
[NASA-CASE-MFS-20596] c14 N72-17324
- Phototropic composition of matter with sensitivity to ultraviolet light and usable for producing positive photographic images
[NASA-CASE-XGS-03736] c14 N72-22443
- Method for determining thermo-physical properties of specimens --- photographic recording of changes in thin film phase-change temperature indicating material in wind tunnel
[NASA-CASE-LAR-11053-1] c25 N74-18551
- PHOTOIONIZATION**
Multichannel photoionization chamber for measuring absorption, photoionization yield, and coefficients of gases
[NASA-CASE-ERC-10044-1] c14 N71-27090
- PHOTOLYSIS**
Solar photolysis of water
[NASA-CASE-NPO-13675-1] c44 N77-32580
- PHOTOGRAPHING**
Window defect planar mapping technique
[NASA-CASE-MSC-19442-1] c74 N77-10899
- PHOTOMETERS**
Michelson interferometer with photodetector for optical direction sensing
[NASA-CASE-NPO-10320] c14 N71-17655
Indicator device for monitoring charge of wet cell battery, using semiconductor light emitter and photodetector
[NASA-CASE-NPO-10194] c03 N71-20407
Electro-optical detector for determining position of light source
[NASA-CASE-XNP-01059] c23 N71-21821
Photometric flow meter with comparator reference means
[NASA-CASE-XGS-01331] c14 N71-22996
Development of radiant energy sensor to detect the radiant energy wavelength bands from portions of radiating body
[NASA-CASE-ERC-10174] c14 N72-25409
Characteristics of infrared photodetectors manufactured from semiconductor material irradiated by electron beam
[NASA-CASE-LAR-10728-1] c14 N73-12445
- Chromato-fluorographic drug detector --- device for detecting and recording fluorescent properties of materials
[NASA-CASE-ARC-10633-1] c25 N74-26947
- A 2 degree/90 degree laboratory scattering photometer
[NASA-CASE-GSC-12088-1] c35 N76-17369
- PHOTOGRAPHY**
Stereo photomicrography system with stereo microscope for viewing specimen at various magnifications
[NASA-CASE-LAR-10176-1] c14 N72-20380
Device for displaying and recording angled views of samples to be viewed by microscope
[NASA-CASE-GSC-11690-1] c14 N73-28499
Hand-held, lightweight, portable photomicroscope
[NASA-CASE-ARC-10468-1] c14 N73-33361
- PHOTOMULTIPLIER TUBES**
Photomultiplier detector of Canopus for spacecraft attitude control
[NASA-CASE-XNP-03914] c21 N71-10771
Electronic divider and multiplier for analog electric signals
[NASA-CASE-XFR-05637] c09 N71-19480
Circuit design for determining amount of photomultiplier tube light detection utilizing variable current source and dark current signals of opposite polarity
[NASA-CASE-XMS-03478] c14 N71-21040
Apparatus for detecting particle emission lower than noise level of multiplier tube
[NASA-CASE-XLA-07813] c14 N72-17328
Scan oscilloscope for mapping surface sensitivity of photomultiplier tube
[NASA-CASE-LAR-10320-1] c09 N72-23172
Design and development of light sensing device for controlling orientation of object relative to sun or other light source
[NASA-CASE-NPO-11201] c14 N72-27409
Photomultiplier circuit including means for rapidly reducing the sensitivity thereof --- and protection from radiation damage
[NASA-CASE-ARC-10593-1] c33 N74-27682
- PHOTON BEAMS**
Apparatus for photon excited catalysis
[NASA-CASE-NPO-13566-1] c25 N77-32255
- PHOTONS**
Solar cell collector and method for producing same --- indium alloy coatings
[NASA-CASE-LEW-12552-1] c44 N77-17564
- PHOTOSENSITIVITY**
Photosensitive light source device for detecting unmanned spacecraft deviation from reference attitude
[NASA-CASE-XNP-00438] c21 N70-35089
Light sensitive control system for automatically opening and closing dome of solar optical telescope
[NASA-CASE-MSC-10966] c14 N71-19568
Scan oscilloscope for mapping surface sensitivity of photomultiplier tube
[NASA-CASE-LAR-10320-1] c09 N72-23172
Holography utilizing surface plasmon resonances
[NASA-CASE-MFS-22040-1] c35 N74-26946
Apparatus for calibrating an image dissector tube
[NASA-CASE-MFS-22208-1] c33 N75-26244
- PHOTOTRANSISTORS**
Phototransistor imaging system with mosaic of phototransistors on semiconductor substrate
[NASA-CASE-MFS-20809] c23 N73-13660
Phototransistor with base collector junction diode for integration into photo sensor arrays
[NASA-CASE-MFS-20407] c09 N73-19235
- PHOTOTROPISM**
Phototropic composition of matter with sensitivity to ultraviolet light and usable for producing positive photographic images
[NASA-CASE-XGS-03736] c14 N72-22443
- PHOTOVISCOELASTICITY**
Photographic method for measuring viscoelastic strain in solid propellants and other materials
[NASA-CASE-XNP-01153] c32 N71-17645
- PHOTOVOLTAIC CELLS**
Sensor consisting of photocells mounted on pyramidal base for improved pointing accuracy of planetary trackers
[NASA-CASE-XNP-04180] c07 N69-39736
Light sensitive digital aspect sensor for attitude control of earth satellites or space probes
[NASA-CASE-XGS-00359] c14 N70-34158
Method of producing output voltage from photovoltaic cell using poly-N-vinyl carbazole complexed with iodine
[NASA-CASE-NPO-10373] c03 N71-18698
Use of thin film light detector
[NASA-CASE-NPO-11432-2] c35 N74-15090
Photovoltaic cell array
[NASA-CASE-MFS-22458-1] c44 N77-10635
Method for fabricating solar cells having integral collector grids
[NASA-CASE-LEW-12819-1] c44 N77-24593

PHOTOVOLTAIC EFFECT

Semiconductor in resonant cavity for improving signal to noise ratio of communication receiver
[NASA-CASE-MSC-12259-1] c07 N70-12616
Use of thin film light detector
[NASA-CASE-NPO-11432-2] c35 N74-15090

PHYSICAL EXERCISE

Development of restraint system for securing personnel to ergometer while exercising under weightless conditions
[NASA-CASE-MFS-21046-1] c14 N73-27377
Tilting table for testing human body in variety of positions while exercising on ergometer or other biomedical devices
[NASA-CASE-MFS-21010-1] c05 N73-30078
Manual actuator --- for spacecraft exercising machines
[NASA-CASE-MFS-21481-1] c37 N74-18127
Therapeutic hand exerciser
[NASA-CASE-LAR-11667-1] c52 N76-19785
Tread drum for animals
[NASA-CASE-ARC-10917-1] c37 N76-20485

PHYSICAL PROPERTIES

Chemical and physical properties of synthetic polyurethane polymer prepared by reacting hydroxy carbonate with organic diisocyanate
[NASA-CASE-MFS-10512] c06 N73-30099

PHYSIOLOGICAL EFFECTS

Restraint torso for increased mobility and reduced physiological effects while wearing pressurized suits
[NASA-CASE-MSC-12397-1] c05 N72-25119

PHYSIOLOGICAL TESTS

Vibrophonocardiograph comprising low weight and small volume piezoelectric microphone with amplifier having high input impedance for high sensitivity and low frequency response
[NASA-CASE-XFR-07172] c05 N71-27234
Medical subject monitoring systems --- multichannel monitoring systems
[NASA-CASE-MSC-14180-1] c52 N76-14757

PHYSIOLOGY

Piezoelectric transducer for monitoring sound waves of physiological origin
[NASA-CASE-XMS-05365] c14 N71-22993
Method of detecting and counting bacteria
[NASA-CASE-GSC-11917-2] c51 N76-29891

PIERCING

Pressurized cell micrometeoroid detector
[NASA-CASE-XLA-00936] c14 N71-14996

PIEZOELECTRIC CRYSTALS

Miniature solid state, direction sensitive, stress transducer design with bonded semiconductive piezoresistive element for sensing residual stresses
[NASA-CASE-XNP-02983] c14 N71-21091
Ultra-stable oscillator with complementary transistors
[NASA-CASE-GSC-11513-1] c33 N74-20862

PIEZOELECTRIC TRANSDUCERS

Piezoelectric transducer for detecting and measuring micrometeoroids
[NASA-CASE-XAC-01101] c14 N70-41957
Describing crystal oscillator instrument for detecting condensable gas contaminants in vacuum apparatus
[NASA-CASE-NFO-10144] c14 N71-17701
Piezoelectric transducer for monitoring sound waves of physiological origin
[NASA-CASE-XMS-05365] c14 N71-22993
Miniature piezofunction semiconductor transducer with in situ stress coupling
[NASA-CASE-ERC-10087-2] c14 N72-31446

PIEZOELECTRICITY

Piezoelectric means for missile stage separation indication and stage initiation
[NASA-CASE-XLA-00791] c03 N70-39930
Piezoelectric pump for supplying fluid at high frequencies to gyroscope fluid suspension system
[NASA-CASE-XNP-05429] c26 N71-21824
Miniature electromechanical junction transducer operating on piezofunction effect and utilizing epoxy for stress coupling component
[NASA-CASE-ERC-10087] c14 N71-27334

PIEZORESISTIVE TRANSDUCERS

Miniature solid state, direction sensitive, stress transducer design with bonded semiconductive piezoresistive element for sensing residual stresses

[NASA-CASE-XNP-02983] c14 N71-21091
Solid state force measuring electromechanical transducers made of piezoresistive materials
[NASA-CASE-ERC-10088] c26 N71-25490

PIGMENTS

Binder stabilized zinc oxide pigmented coating for spacecraft thermal control
[NASA-CASE-XNF-07770-2] c18 N71-26772

PILOT ERROR

Spectrally balanced chromatic landing approach lighting system
[NASA-CASE-ARC-10990-1] c04 N77-12031

PILOT TRAINING

Controlled visibility device for simulating poor visibility conditions in training pilots in instrument landing and flight procedures
[NASA-CASE-XFR-04147] c11 N71-10748
Kinesthetic control simulator --- for pilot training
[NASA-CASE-LAR-10276-1] c09 N75-15662

PILOTS (PERSONNEL)

Pilot warning indicator system of intruder aircraft
[NASA-CASE-ERC-10226-1] c14 N73-16483

PINS

Fatigue resistant shear pin with hollow shaft and two plugs
[NASA-CASE-XLA-09122] c15 N69-27505
Blade vibration damping pins for turbomachinery
[NASA-CASE-XLE-00155] c28 N71-29154
Design of quick release locking pin for joining two or more load-carrying structural members
[NASA-CASE-MFS-18495] c15 N72-11385

PINTLES

Describing metal valve pintle with encapsulated elastomeric body
[NASA-CASE-MSC-12116-1] c15 N71-17648

PIPE FLOW

Flat-plate heat pipe
[NASA-CASE-GSC-11998-1] c34 N77-32413

PIPELINES

Flexible bellows joint shielding sleeve for propellant transfer pipelines
[NASA-CASE-XNP-01855] c15 N71-28937
Insulation for piping
[NASA-CASE-MSC-19523-1] c31 N76-16245

PIPES (TUBES)

Capacitance measuring device for determining flare accuracy on tapered tubes
[NASA-CASE-XKS-03495] c14 N69-39785
Low thermal loss piping arrangement for moving cryogenic media through double chamber structure
[NASA-CASE-XNP-08882] c15 N69-39935
Foldable conduit capable of springing back as self erecting structural member
[NASA-CASE-XLE-00620] c32 N70-41579
Mounting fixture for supporting thermobulb in pipeline
[NASA-CASE-NFO-10158] c33 N71-16356
Method and apparatus for shaping and joining large diameter metal tubes using magnetomotive forces
[NASA-CASE-XNP-05114] c15 N71-17650
Sealed separable connection for thin wall metal tube
[NASA-CASE-NFO-10064] c15 N71-17693
Electrical switching device comprising conductive liquid confined within square loop of deformable nonconductive tubing also used for leveling
[NASA-CASE-NPO-10037] c09 N71-19610
Hand tool for forming dimples and nipples on end portion of tubes
[NASA-CASE-XMS-06876] c15 N71-21536
Nonconductive tube as feed system for plasma thruster
[NASA-CASE-XLE-02902] c25 N71-21694
Apparatus and method for spin forming tubular elbows with high strength, uniform thickness, and close tolerances
[NASA-CASE-XNF-01083] c15 N71-22723
Description of portable milling tool for milling tube or pipe ends to desired shape and thickness
[NASA-CASE-XNF-03511] c15 N71-22799
Gage for measuring internal angle of flare on end of tube
[NASA-CASE-XNF-04415] c14 N71-24693
Method and apparatus for portable high precision magnetomotive bulging, constricting, and

- joining of large diameter metal tubes
[NASA-CASE-XMP-05114-3] c15 N71-24865
- Portable cutting machine for piping weld preparation
[NASA-CASE-XKS-07953] c15 N71-26134
- Method and apparatus for precision sizing and joining of large diameter tubes by bulging or constricting overlapping ends
[NASA-CASE-XMP-05114-2] c15 N71-26148
- Collapsible antenna boom and coaxial transmission line having inflatable inner tube
[NASA-CASE-NFS-20068] c07 N71-27191
- Process for developing filament reinforced plastic tubes used in research and development programs
[NASA-CASE-LAR-10203-1] c15 N72-16330
- Torsional disconnect device for releasably coupling distal ends of fluid conduits
[NASA-CASE-NFO-10704] c15 N72-20445
- Open type urine receptacle with tubular housing
[NASA-CASE-NSC-12324-1] c05 N72-22093
- Measuring method for cutaneous perception using instrument with elongated tubular housing
[NASA-CASE-NSC-13609-1] c05 N72-25122
- Low mass truss structure with elongated thin-walled tubular segments
[NASA-CASE-LAR-10546-1] c11 N72-25287
- Honeycomb panels of minimal surface, periodic tubule layers
[NASA-CASE-ERC-10364] c18 N72-25540
- Honeycomb core structures of minimum surface tubule sections
[NASA-CASE-ERC-10363] c18 N72-25541
- U shaped heated tube for distillation and purification of liquid metals
[NASA-CASE-XNP-08124-2] c06 N73-13129
- Cable guide and restraint device for reefing tubes in uniform manner
[NASA-CASE-LAR-10129-1] c15 N73-25512
- Twisted wire or tube superconductor for filament windings
[NASA-CASE-LFW-11015] c26 N73-32571
- Open tube guideway for high speed air cushioned vehicles
[NASA-CASE-LAR-10256-1] c85 N74-34672
- Method for fabricating a mass spectrometer inlet leak
[NASA-CASE-GSC-12077-1] c35 N77-24455
- PISTON ENGINES**
Stirling cycle engine and refrigeration systems
[NASA-CASE-NFO-13613-1] c37 N76-29590
- PISTONS**
Automatically reciprocating, high pressure pump for use in spacecraft cryogenic propellants
[NASA-CASE-XNP-04731] c15 N71-24042
- Pumping and metering dual piston system and monitor for reaction chamber constituents
[NASA-CASE-GSC-10218-1] c15 N72-21465
- Collapsible piston for hypervelocity gun
[NASA-CASE-NSC-13789-1] c11 N73-32152
- Airflow control system for supersonic inlets
[NASA-CASE-LFW-11188-1] c02 N74-20646
- PITCH (INCLINATION)**
Reverse pitch fan with divided splitter
[NASA-CASE-LFW-12760-1] c07 N77-17059
- PIVOTS**
Apparatus for measuring load on cable under static or dynamic conditions comprising pulleys pivoting structure against restraint of tension strap
[NASA-CASE-XMS-04545] c15 N71-22878
- PLANAR STRUCTURES**
Window defect planar mapping technique
[NASA-CASE-NSC-19402-1] c74 N77-10899
- PLANE WAVES**
Characteristics of microwave antenna with conical reflectors to generate plane wave front
[NASA-CASE-NFO-11661] c07 N73-14130
- PLANETARY ATMOSPHERES**
Planetary atmospheric investigation using split trajectory dual flyby mode
[NASA-CASE-IAC-08494] c30 N71-15990
- Wind tunnel method for simulating flow fields around blunt vehicles entering planetary atmospheres without involving high temperatures
[NASA-CASE-LAR-11138] c12 N71-20436
- Ablation sensor for measuring surface ablation rate of material on vehicles entering earths atmosphere on entry into planetary atmospheres
[NASA-CASE-XLA-01791] c14 N71-22991
- PLANETARY GRAVITATION**
Lunar and planetary gravity simulator to test vehicular response to landing
[NASA-CASE-XLA-00493] c11 N70-34786
- Table structure and rotating magnet system simulating gravitational forces on spacecraft and displaying trajectories between Earth, Venus, and Mercury
[NASA-CASE-XNP-00708] c14 N70-35394
- PLANETARY LANDING**
Multiple parachute system for landing control of Apollo type spacecraft
[NASA-CASE-XLA-00898] c02 N70-36804
- Payload soft landing system using stowable gas bag
[NASA-CASE-XLA-09881] c31 N71-16085
- PLANETARY ORBITS**
Self-erectable space structures of flexible foam for application in planetary orbits
[NASA-CASE-XLA-00686] c31 N70-34135
- Manned space station collapsible for launching and self-erectable in orbit
[NASA-CASE-XLA-00678] c31 N70-34296
- PLANETARY RADIATION**
Attitude sensor with scanning mirrors for detecting orientation of space vehicle with respect to planet
[NASA-CASE-XLA-00793] c21 N71-22880
- PLANETARY SUBFACES**
Spacecraft transponder and ground station radar system for mapping planetary surfaces
[NASA-CASE-NFO-11001] c07 N72-21118
- PLANTS (BOTANY)**
Rotary plant growth accelerating apparatus --- weightlessness
[NASA-CASE-ARC-10722-1] c51 N75-25503
- PLASMA ACCELERATION**
Increasing available power per unit area in ion rocket engine by increasing beam density
[NASA-CASE-XLB-00519] c28 N70-41576
- Coaxial, high density, hypervelocity plasma generator and accelerator using electrodes
[NASA-CASE-NFS-20589] c25 N72-32688
- PLASMA ACCELERATORS**
Crossed-field plasma accelerator for laboratory simulation of atmospheric reentry conditions
[NASA-CASE-XLA-00675] c25 N70-33267
- Continuous operation, single phased, induction plasma accelerator producing supersonic speeds
[NASA-CASE-XLA-01354] c25 N70-36946
- Crossed field MHD plasma generator-accelerator
[NASA-CASE-XLA-03374] c25 N71-15562
- Direct current powered self repeating plasma accelerator with interconnected annular and linear discharge channels
[NASA-CASE-XLA-03103] c25 N71-21693
- Magnetically controlled plasma accelerator capable of ignition in low density gaseous environment
[NASA-CASE-XLA-00327] c25 N71-29184
- Two stage light gas-plasma projectile accelerator
[NASA-CASE-NFS-22287-1] c75 N76-14931
- PLASMA CONTROL**
Superconducting magnetic field trapping device for producing magnetic field in air
[NASA-CASE-XNP-01185] c26 N73-28710
- Self-energized plasma compressor --- for compressing plasma discharged from coaxial plasma generator
[NASA-CASE-NFS-22145-1] c75 N75-13625
- PLASMA CYLINDERS**
Plasma-fluidic hybrid display system combining high brightness and memory characteristics
[NASA-CASE-ERC-10100] c09 N71-33519
- PLASMA DENSITY**
Apertured electrode focusing system for ion sources with nonuniform plasma density
[NASA-CASE-XNP-03332] c09 N71-10618
- Measurement of plasma temperature and density using radiation absorption
[NASA-CASE-ARC-10598-1] c75 N74-30156
- PLASMA DIAGNOSTICS**
Plasma probes having guard ring and primary sensor at same potential to prevent stray wall current collection in ionized gases
[NASA-CASE-XLE-00690] c25 N69-39884
- Apparatus for measuring conductivity and velocity of plasma with multiple sensing coils positioned in plasma

- [NASA-CASE-XAC-05695] c25 N71-16073
Measurement of plasma temperature and density
using radiation absorption
[NASA-CASE-ARC-10598-1] c75 N74-30156
- PLASMA DYNAMICS**
Apparatus for measuring conductivity and
velocity of plasma with multiple sensing coils
positioned in plasma
[NASA-CASE-XAC-05695] c25 N71-16073
Self-energized plasma compressor --- for
compressing plasma discharged from coaxial
plasma generator
[NASA-CASE-MFS-22145-1] c75 N75-13625
- PLASMA ENGINES**
Nonconductive tube as feed system for plasma
thruster
[NASA-CASE-XLE-02902] c25 N71-21694
- PLASMA GENERATORS**
Apparatus for producing highly conductive, high
temperature electron plasma with homogenous
temperature and pressure distribution
[NASA-CASE-XLA-00147] c25 N70-34661
Crossed field MHD plasma generator-accelerator
[NASA-CASE-XLA-03374] c25 N71-15562
Coaxial, high density, hypervelocity plasma
generator and accelerator using electrodes
[NASA-CASE-MFS-20589] c25 N72-32688
Self-energized plasma compressor --- for
compressing plasma discharged from coaxial
plasma generator
[NASA-CASE-MFS-22145-1] c75 N75-13625
Self-energized plasma compressor
[NASA-CASE-MFS-22145-2] c75 N76-17951
Continuous plasma laser --- method and apparatus
for producing intense, coherent, monochromatic
light from low temperature plasma
[NASA-CASE-XNP-04167-3] c36 N77-19416
- PLASMA GUNS**
Plasma spraying gun for forming diffusion bonded
metal or ceramic coatings on substrates
[NASA-CASE-XLS-01604-2] c15 N71-15610
- PLASMA JETS**
Method of preparing water purification membranes
--- polymerization of allyl amine as thin
films in plasma discharge
[NASA-CASE-ARC-10643-1] c25 N75-12087
Combination automatic-starting electrical plasma
torch and gas shutoff valve --- for satellite
attitude control
[NASA-CASE-XLE-10717] c37 N75-29426
Plasma cleaning device
[NASA-CASE-MFS-22906-1] c75 N76-24001
- PLASMA LAYERS**
Electrostatic modulator for communicating
through plasma sheath formed around spacecraft
during reentry
[NASA-CASE-XLA-01400] c07 N70-41331
Method and apparatus for communicating through
ionized layer of gases surrounding spacecraft
during reentry into planetary atmospheres
[NASA-CASE-XLA-01127] c07 N70-41372
Reentry communication by injection of water
droplets into plasma layer surrounding space
vehicle
[NASA-CASE-XLA-01552] c07 N71-11284
- PLASMA POTENTIALS**
Method and apparatus for measuring potentials in
plasmas
[NASA-CASE-XLE-00821] c25 N71-15650
Method and apparatus for neutralizing potentials
induced on spacecraft surfaces
[NASA-CASE-GSC-11963-1] c33 N77-10429
- PLASMA PROBES**
Plasma probes having guard ring and primary
sensor at same potential to prevent stray wall
current collection in ionized gases
[NASA-CASE-XLE-00690] c25 N69-39884
Small plasma probe using tungsten wire collector
in tubular shield
[NASA-CASE-XLE-02578] c25 N71-20747
- PLASMA PROPULSION**
Method of making dished ion thruster grids
[NASA-CASE-LEW-11694-1] c20 N75-18310
- PLASMA RADIATION**
Development of method for measuring electron
density gradients of plasma sheath around
space vehicle during atmospheric entry
[NASA-CASE-XLA-06232] c25 N71-20563
- Apparatus for producing monochromatic light from
continuous plasma source
[NASA-CASE-XNP-04167-2] c25 N72-24753
- PLASMA SHEATHS**
Space environment simulation system for
measuring spacecraft electric field strength
in plasma sheath
[NASA-CASE-XLE-02038] c09 N71-16086
Development of method for measuring electron
density gradients of plasma sheath around
space vehicle during atmospheric entry
[NASA-CASE-XLA-06232] c25 N71-20563
- PLASMA SPRAYING**
Flame or plasma spraying for molybdenum coating
of carbon or graphite surfaces to prevent
oxidative corrosion
[NASA-CASE-XLA-00302] c15 N71-16077
- PLASMA TEMPERATURE**
Measurement of plasma temperature and density
using radiation absorption
[NASA-CASE-ARC-10598-1] c75 N74-30156
- PLASMAS (PHYSICS)**
Apparatus for measuring conductivity and
velocity of plasma with multiple sensing coils
positioned in plasma
[NASA-CASE-XAC-05695] c25 N71-16073
- PLASTIC COATINGS**
Process permitting application of synthetic
resin coating to irregular-shaped objects at
ambient temperature
[NASA-CASE-XNP-06508] c18 N69-39895
Development and characteristics of system for
skin packaging articles using thermoplastic
film heating and vacuum operated equipment
[NASA-CASE-MFS-20855] c15 N73-27405
Polymer coatings for moisture protection of
optical windows in infrared spectroscopy
[NASA-CASE-ARC-10749-1] c23 N73-32542
Silicon nitride coated, plastic covered solar cell
[NASA-CASE-LEW-11496-1] c44 N77-14580
Low density bismaleimide-carbon macroballoon
composites
[NASA-CASE-ARC-11040-1] c24 N77-19173
Surface finishing --- of metal airfoils by
adhesive bonding
[NASA-CASE-MSC-12631-2] c05 N77-31131
- PLASTIC DEFORMATION**
Process for analysis of strain field of
structures subjected to large deformations
involving low modulus substrate with thin
coating
[NASA-CASE-LAR-10765-1] c32 N73-20740
- PLASTIC TAPES**
Development of flexible thermocouple in form of
tape for adaptation to special temperature
measuring conditions
[NASA-CASE-LEW-11072-1] c14 N73-24472
- PLASTICS**
Hot forming of plastic sheets
[NASA-CASE-XMS-05516] c15 N71-17803
Technique for making foldable, inflatable,
plastic honeycomb core panels for use in
building and bridge structures, light and
radio wave reflectors, and spacecraft
[NASA-CASE-XLA-03492] c15 N71-22713
Electrode sealing and insulation for fuel cells
containing caustic liquid electrolytes using
powdered plastic and metal
[NASA-CASE-XMS-01625] c15 N71-23022
Dielectric apparatus for heating, fusing, and
hardening of organic matrix to form plastic
material into shaped product
[NASA-CASE-LAR-10121-1] c15 N71-26721
Plastic sphere for radar tracking and calibration
[NASA-CASE-XLA-11154] c07 N72-21117
Molding apparatus --- for thermosetting plastic
compositions
[NASA-CASE-LAR-10489-2] c31 N74-32920
Ultraviolet and thermally stable polymer
compositions
[NASA-CASE-ARC-10592-2] c27 N76-32315
Formulated plastic separators for soluble
electrode cells --- rubber-ion transport sheeting
[NASA-CASE-LEW-12358-1] c44 N77-18560
Oxygen post-treatment of plastic surfaces coated
with plasma polymerized silicon-containing
monomers
[NASA-CASE-ARC-10915-2] c27 N77-20256

- Abrasion resistant coatings for plastic surfaces
[NASA-CASE-ARC-10915-3] c24 N77-24200
- PLATES (STRUCTURAL MEMBERS)**
Poil seal between parts moving relative to each other
[NASA-CASE-XLE-05130] c15 N69-21362
Fifth wheel
[NASA-CASE-FRC-10081-1] c37 N77-14477
- PLATING**
Selective plating of etched circuits without removing previous plating
[NASA-CASE-IGS-03120] c15 N71-24047
Metal plating process employing spraying of metallic power/peening particle mixture
[NASA-CASE-GSC-11163-1] c15 N73-32360
Scanning nozzle plating system --- for etching or plating metals on substrates without masking
[NASA-CASE-NFO-11758-1] c31 N74-23065
- PLATINUM**
Electrolytic cell structure
[NASA-CASE-LAR-11042-1] c33 N75-27252
Platinum resistance thermometer circuit
[NASA-CASE-MSC-12327-1] c35 N77-27368
- PLAYBACKS**
Method of and means for testing a tape record/playback system
[NASA-CASE-MFS-22671-2] c35 N77-17426
- PLENUM CHAMBERS**
Platform with several ground effect pads and plenum chambers
[NASA-CASE-NPS-14685] c31 N71-15689
Development of filter apparatus for gas separation and characteristics of filter cell support frame for improved operation
[NASA-CASE-MSC-12297] c14 N72-23457
- PLETHYSMOGRAPHY**
Readout electrode assembly for measuring biological impedance
[NASA-CASE-ARC-10816-1] c35 N76-24525
- PLOTTERS**
Plotter device for automatically drawing equipotential lines on sheet of resistance paper
[NASA-CASE-NFO-11134] c09 N72-21246
- PLOTTING**
Instrument for measuring potentials on two dimensional electric field plot
[NASA-CASE-XLA-08493] c10 N71-19421
- PLUG NOZZLES**
Cascade plug nozzle --- for jet noise reduction
[NASA-CASE-LAR-11674-1] c07 N76-18117
- PLUGS**
Rocket chamber leak test fixture using tubular plug
[NASA-CASE-XPR-09479] c14 N69-27503
Fatigue resistant shear pin with hollow shaft and two plugs
[NASA-CASE-XLA-09122] c15 N69-27505
Control of gas flow from pressurized vessel by thermal expansion of metal plug
[NASA-CASE-NFO-10298] c12 N71-17661
Heated porous plug microthruster for spacecraft reaction jet controlled systems such as fuel flow regulation, propellant disassociation, and heat transfer augmentation
[NASA-CASE-GSC-10640-1] c28 N72-18766
- PNEUMATIC CONTROL**
Pneumatic system for cyclic control of fluid flow in pneumatic device
[NASA-CASE-XMS-04843] c03 N69-21469
Pneumatic control of telescopic mirror support system
[NASA-CASE-XLA-03271] c11 N69-24321
Actuator using compressed gas as driving force to control valve handling large liquid flows
[NASA-CASE-IBQ-01208] c15 N70-35409
Pneumatic mechanism for releasing hook and loop fasteners between large rigid structures
[NASA-CASE-XMS-10660-1] c15 N71-25975
Pneumatic foot pedal operated fluidic exercising device
[NASA-CASE-MSC-11561-1] c05 N73-32014
Pneumatic load compensating or controlling system
[NASA-CASE-ARC-10907-1] c37 N75-32465
- PNEUMATIC EQUIPMENT**
Development and characteristics of high pressure control valve
[NASA-CASE-MSC-11010] c15 N71-19485
Pneumatic cantilever beams and platform for space erectable structure
[NASA-CASE-XLA-01731] c32 N71-21045
Fluid transferring system design for purging toxic, corrosive, or noxious fluids and fumes from materials handling equipment for cleansing and accident prevention
[NASA-CASE-XMS-01905] c12 N71-21089
Zero gravity apparatus utilizing pneumatic decelerating means to create payload subjected to zero gravity conditions by dropping its height
[NASA-CASE-INP-06515] c14 N71-23227
Pneumatic servoamplifier for controlling flow regulation
[NASA-CASE-MSC-12121-1] c15 N71-27147
Inflatable stabilizing system for use on life raft to reduce rocking and preclude capsizing
[NASA-CASE-MSC-12393-1] c02 N73-26006
Airlock
[NASA-CASE-MFS-20922-1] c18 N74-22136
Servo valve
[NASA-CASE-LAR-11643-1] c37 N75-13268
Pneumatic load compensating or controlling system
[NASA-CASE-ARC-10907-1] c37 N75-32465
- POINT SOURCES**
Electronic background suppression field scanning sensor for detecting point source targets
[NASA-CASE-IGS-05211] c07 N69-39980
X ray collimating structure for focusing radiation directly onto detector
[NASA-CASE-IBQ-04106] c14 N70-40240
- POINTING CONTROL SYSTEMS**
Development of reflector system for application to line-of-sight pointing and tracking telescopes
[NASA-CASE-NPO-10468] c23 N71-33229
Magnetic suspension and pointing system
[NASA-CASE-LAR-11889-1] c19 N76-18227
All sky pointing attitude control system
[NASA-CASE-ARC-10716-1] c35 N77-20399
- POLAR ORBITS**
Spin phase synchronization of cartwheel satellite in polar orbit
[NASA-CASE-IGS-05579] c31 N71-15676
- POLARIMETERS**
Automatic polarimeter capable of measuring transient birefringence changes in electro-optic materials
[NASA-CASE-INP-08883] c23 N71-16101
Two beam interferometer-polarimeter
[NASA-CASE-NFO-11239] c14 N73-12446
Forward-scatter polarimeter for determining the gaseous depolarization factor in the presence of polluting polydispersed particles
[NASA-CASE-NFO-13756-1] c35 N76-14434
- POLARITY**
Converting output of positive dc voltage source to negative dc voltage across load with common reference point
[NASA-CASE-INP-08217] c03 N71-23239
Peak polarity selector for monitoring waveforms
[NASA-CASE-FRC-10010] c10 N71-24862
Precision full wave rectifier circuit for rectifying incoming electrical signals having positive or negative polarity with only positive output signals
[NASA-CASE-ARC-10101-1] c09 N71-33109
- POLARIZATION (WAVES)**
System for interference signal nulling by polarization adjustment
[NASA-CASE-NFO-13140-1] c32 N75-24982
- POLARIZED ELECTROMAGNETIC RADIATION**
Device for improving efficiency of parabolic horn antenna system for linearly polarized signals
[NASA-CASE-INP-00611] c09 N70-35219
Device for improving efficiency of parabolic reflector horn for linearly or circularly polarized waves
[NASA-CASE-INP-00540] c09 N70-35382
- POLARIZED LIGHT**
Polarization compensator for optical communications
[NASA-CASE-GSC-11782-1] c74 N76-30053
- POLARIZERS**
Partial polarizer filter
[NASA-CASE-GSC-12225-1] c74 N77-30935
- POLISHING**
Conforming polisher for aspheric surfaces of revolution with inflatable tube

POLLUTION CONTROL

SUBJECT INDEX

[NASA-CASE-XGS-02884] c15 N71-22705

POLLUTION CONTROL

System for minimizing internal combustion engine pollution emission
[NASA-CASE-NPO-13402-1] c37 N76-18457

Combustion engine --- for air pollution control
[NASA-CASE-NPO-13671-1] c37 N77-31497

POLLUTION MONITORING

Fluorescence detector for monitoring atmospheric pollutants
[NASA-CASE-NPO-13231-1] c45 N75-27585

Stack plume visualization system
[NASA-CASE-LAR-11675-1] c45 N76-17656

Indicator providing continuous indication of the presence of a specific pollutant in air
[NASA-CASE-NPO-13474-1] c45 N76-21742

Method for detecting pollutants --- through chemical reactions and heat treatment
[NASA-CASE-LAR-11405-1] c45 N76-31714

POLYAMIDE RESINS

Process for producing flame resistant polyamides and products produced thereby
[NASA-CASE-MSC-16074-1] c27 N77-14262

POLYBUTADIENE

Synthesis of polyfluorobutadiene by polymerization of perfluorobutadiene with diisopropyl peroxydicarbonate
[NASA-CASE-NPO-10863] c06 N70-11251

Low pressure perfluorobutadiene polymerization with peroxide catalysts
[NASA-CASE-NPO-10447] c06 N70-11252

POLYCARBONATES

Transparent polycarbonate resin, shell helmet and latch design for high altitude and space flight
[NASA-CASE-XMS-04935] c05 N71-11190

POLYCRYSTALS

Improved low cost substrates for polycrystalline solar cells --- for solar energy conversion
[NASA-CASE-GSC-12022-2] c44 N76-26695

Fabrication of polycrystalline solar cells on low-cost substrates
[NASA-CASE-GSC-12022-1] c44 N76-28635

POLYESTERS

Carboxyl terminated polyester prepolymers and foams produced from prepolymers and materials
[NASA-CASE-NPO-10596] c06 N71-25929

Apparatus for forming drive belts
[NASA-CASE-NPO-13205-1] c31 N74-32917

Flexible formulated plastic separators for alkaline batteries
[NASA-CASE-LRW-12363-1] c44 N76-19552

POLYETHER RESINS

Preparation of stable polyurethane polymer by reacting polymer with diisocyanate
[NASA-CASE-MFS-10506] c06 N73-30100

Preparation of fluorohydroxy ethers by reacting fluoroalkylene oxides with alkali salt of polyfluoroalkylene diol
[NASA-CASE-MFS-10507] c06 N73-30101

Preparation of fluorinated polyethers from 2-hydro-perhaloisopropyl alcohols
[NASA-CASE-MFS-11492] c06 N73-30102

Flexible formulated plastic separators for alkaline batteries
[NASA-CASE-LRW-12363-1] c44 N76-19552

POLYIMIDE RESINS

Polyimide adhesives
[NASA-CASE-LAR-11397-1] c27 N75-29263

POLYIMIDES

Stable polyimide synthesis from mixtures of monomeric diamines and polycarboxylic acid esters
[NASA-CASE-LRW-11325-1] c06 N73-27980

Polyimide foam for the thermal insulation and fire protection
[NASA-CASE-ARC-10464-1] c27 N74-12812

Aromatic polyimide preparation --- with low softening temperatures
[NASA-CASE-LAR-11372-1] c27 N74-19772

Reinforced structural plastics
[NASA-CASE-LRW-10199-1] c27 N74-23125

A method of preparing aromatic polyimides having uniquely low softening temperatures
[NASA-CASE-LAR-11828-1] c23 N75-29181

Polyimides of ether-linked aryl tetracarboxylic dianhydrides
[NASA-CASE-MFS-22355-1] c23 N76-15268

Honeycomb-laminate composite structure
[NASA-CASE-ARC-10913-1] c24 N76-26286

Polyimide adhesives
[NASA-CASE-LAR-12181-1] c27 N77-15192

POLYISOBUTYLENE

Chemical process for production of polyisobutylene compounds and application as solid rocket propellant binder
[NASA-CASE-NPO-10893] c27 N73-22710

POLYMER CHEMISTRY

New trifunctional alcohol derived from trimer acid and novel method of preparation
[NASA-CASE-NPO-10714] c06 N69-31244

Synthesis of siloxane containing epoxy polymers with low dielectric properties
[NASA-CASE-MFS-13994-1] c06 N71-11240

Apparatus for determining volatile condensable material present in polymeric products
[NASA-CASE-XNP-09699] c06 N71-24607

Catalytic trimerization of aromatic nitriles and triaryl-S-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LRW-12053-1] c27 N74-34579

Polyimide adhesives
[NASA-CASE-LAR-11397-1] c27 N75-29263

POLYMERIC FILMS

Ethylene oxide sterilization and encapsulating process for sterile preservation of instruments and solid propellants
[NASA-CASE-XNP-09763] c14 N71-20461

Hydraulic apparatus for casting and molding of liquid polymers
[NASA-CASE-XNP-07659] c06 N71-22975

Thermodielectric radiometer using polymer film as capacitor
[NASA-CASE-ARC-10138-1] c14 N72-24477

Development and characteristics of system for skin packaging articles using thermoplastic film heating and vacuum operated equipment
[NASA-CASE-MFS-20855] c15 N73-27405

Covered silicon solar cells and method of manufacture --- with polymeric films
[NASA-CASE-LRW-11065-2] c44 N76-14600

Preparation of dielectric coatings of variable dielectric constant by plasma polymerization
[NASA-CASE-ARC-10892-2] c27 N77-17245

A reverse osmosis membrane of high urea rejection properties
[NASA-CASE-ARC-10980-1] c27 N77-18265

Strong thin membrane structure
[NASA-CASE-NPO-14021-1] c27 N77-32313

POLYMERIZATION

Synthesis of polyfluorobutadiene by polymerization of perfluorobutadiene with diisopropyl peroxydicarbonate
[NASA-CASE-NPO-10863] c06 N70-11251

Low pressure perfluorobutadiene polymerization with peroxide catalysts
[NASA-CASE-NPO-10447] c06 N70-11252

Process for interfacial polymerization of pyromellitic dianhydride and tetraamino benzene
[NASA-CASE-XLA-03104] c06 N71-11235

Synthesis and chemical properties of imidazopyrrolone/imide copolymers
[NASA-CASE-XLA-08802] c06 N71-11238

Direct synthesis of polymeric schiff bases from two amines and two aldehydes
[NASA-CASE-XMF-08655] c06 N71-11239

Synthesis of azine polymers for heat shields by azine-aromatic aldehyde reaction
[NASA-CASE-XMF-08656] c06 N71-11242

Synthesis of schiff bases for heat shields by acetal amine reactions
[NASA-CASE-XMF-08652] c06 N71-11243

Preparation of elastomeric diamine silazane polymers
[NASA-CASE-XMF-04133] c06 N71-20717

Reaction of polyperfluoropolyenes with fluorine to produce saturated polymer chain or create reactive sites on chain
[NASA-CASE-NPO-10862] c06 N72-22107

Silphenylenesiloxane polymer with in-chain perfluoroalkyl groups
[NASA-CASE-MFS-20979] c06 N72-25151

Polymerization of perfluorobutadiene
[NASA-CASE-NPO-10863-2] c06 N72-25152

Preparation of fluorohydroxy ethers by reacting fluoroalkylene oxides with alkali salt of

- polyfluoralkylene diol
[NASA-CASE-MFS-10507] c06 N73-30101
- Preparation of fluorinated polyethers from
2-hydro-perhaloisopropyl alcohols
[NASA-CASE-MFS-11492] c06 N73-30102
- Method of preparing water purification membranes
--- polymerization of allyl amine as thin
films in plasma discharge
[NASA-CASE-ARC-10643-1] c25 N75-12087
- Utilization of oxygen difluoride for syntheses
of fluorocyclomers
[NASA-CASE-NFO-12061-1] c27 N76-16228
- Polymeric foams from cross-linkable
poly-N-arylenebenzimidazoles
[NASA-CASE-ARC-11008-1] c27 N76-28421
- Catalytic trimerization of aromatic nitriles and
triaryl-s-triazine ring cross-linked high
temperature resistant polymers and copolymers
made thereby
[NASA-CASE-LEW-12053-2] c23 N77-32244
- POLYMERS**
- Preparation of ordered poly/arylenesiloxane/
polymers
[NASA-CASE-IMP-10753] c06 N71-11237
- Synthesis of aromatic diamines and dialdehyde
polymers using Schiff base
[NASA-CASE-IMP-10374] c06 N71-24740
- Automated ball rebound resilience test equipment
for determining viscoelastic properties of
polymers
[NASA-CASE-XIA-08254] c14 N71-26161
- Infusible polymer production from reaction of
polyfunctional epoxy resins with
polyfunctional aziridine compounds
[NASA-CASE-NFO-10701] c06 N71-28620
- Development of solid state polymer coating for
obtaining thermal balance in spacecraft
components
[NASA-CASE-XIA-01745] c33 N71-28903
- Mercaptan terminated polymer containing sulfonic
acid salts of nitrosubstituted aromatic amines
for heat and moisture resistant coatings
[NASA-CASE-ARC-10325] c06 N72-25147
- Solid propellant containing hydrazinium
nitroformate oxidizer and polymeric
hydrocarbon binder
[NASA-CASE-NFO-12015] c27 N73-16764
- Chemical process for production of
polyisobutylene compounds and application as
solid rocket propellant binder
[NASA-CASE-NFO-10893] c27 N73-22710
- Utilization of lithium p-lithiphenoxide to
prepare star polymers
[NASA-CASE-NFO-10998-1] c06 N73-32029
- Ultraviolet and thermally stable polymer
compositions
[NASA-CASE-ARC-10592-1] c27 N74-21156
- Ultraviolet and thermally stable polymer
compositions
[NASA-CASE-ARC-10592-2] c27 N76-32315
- Oil and fat absorbing polymers
[NASA-CASE-NFO-11609-2] c27 N77-31308
- POLYSACCHARIDES**
- Aldehyde-containing urea-absorbing polysaccharides
[NASA-CASE-NFO-13620-1] c27 N77-30236
- POLYTETRAFLUOROETHYLENE**
- Procedure for bonding polytetrafluoroethylene
thermal protective sleeves to magnesium alloy
conical shell components with different
thermal coefficients
[NASA-CASE-XIA-01262] c15 N71-21404
- Polymeric electrolytic hygrometer
[NASA-CASE-NFO-13948-1] c35 N77-28470
- POLYURETHANE FOAM**
- Self-erectable space structures of flexible foam
for application in planetary orbits
[NASA-CASE-XIA-00686] c31 N70-34135
- Modification of polyurethanes with alkyl halide
resins, inorganic salts, and encapsulated
volatile and reactive halogen for fuel fire
control
[NASA-CASE-ARC-10098-1] c06 N71-24739
- Flexible fire retardant polyisocyanate modified
neoprene foam --- for thermal protective devices
[NASA-CASE-ARC-10180-1] c27 N74-42814
- Fiber modified polyurethane foam for ballistic
protection
[NASA-CASE-ARC-10714-1] c27 N76-15310
- Mixing insert for foam dispensing apparatus
[NASA-CASE-MFS-20607-1] c37 N76-19436
- Polymeric foams from cross-linkable
poly-N-arylenebenzimidazoles
[NASA-CASE-ARC-11008-1] c27 N76-28421
- POLYURETHANE RESINS**
- Chemical synthesis of hydroxy terminated
perfluoro ethers as intermediates for highly
fluorinated polyurethane resins
[NASA-CASE-NFO-10768] c06 N71-27254
- Formation of polyurethane resins from hydroxy
terminated perfluoro ethers
[NASA-CASE-NFO-10768-2] c06 N72-27144
- Fluorinated polyurethanes produced by reacting
hydroxy terminated perfluoro polyether with
diisocyanate
[NASA-CASE-NFO-10767-2] c06 N72-27151
- Chemical and physical properties of synthetic
polyurethane polymer prepared by reacting
hydroxy carbonate with organic diisocyanate
[NASA-CASE-MFS-10512] c06 N73-30099
- Preparation of stable polyurethane polymer by
reacting polymer with diisocyanate
[NASA-CASE-MFS-10506] c06 N73-30100
- Preparation of polyurethane polymer by reacting
hydroxy polyformal with organic diisocyanate
[NASA-CASE-MFS-10509] c06 N73-30103
- Chemical and elastic properties of fluorinated
polyurethanes
[NASA-CASE-NFO-10767-1] c06 N73-33076
- PORCELAIN**
- Refractory porcelain enamel passive control
coating for high temperature alloys
[NASA-CASE-MFS-22324-1] c27 N75-27160
- POROSITY**
- Process for making sheets with parallel pores of
uniform size
[NASA-CASE-GSC-10984-1] c37 N75-26371
- POROUS MATERIALS**
- Production of refractory bodies with controlled
porosity by pressing and heating mixtures of
refractory and inert metal powders
[NASA-CASE-LEW-10393-1] c17 N71-15468
- Multilayer porous refractory metal ionizer
design with thick, porous, large-grain
substrates and thin, porous micron-grain
substrates
[NASA-CASE-IMP-04338] c17 N71-23046
- Lubrication for bearings by capillary action
from oil reservoir of porous material
[NASA-CASE-IMP-03972] c15 N71-23048
- Method and photodetector device for locating
abnormal voids in low density materials
[NASA-CASE-MFS-20044] c14 N71-28993
- Production method for manufacturing porous
tungsten bodies from tungsten powder particles
[NASA-CASE-IMP-04339] c17 N71-29137
- Compressible electrolyte saturated sponge
electrode for biomedical applications
[NASA-CASE-MSC-13648] c05 N72-27103
- Porous electrode for use in electrochemical cells
[NASA-CASE-GSC-11368-1] c09 N73-32108
- Method of making porous conductive supports for
electrodes --- by electroforming and stacking
nickel foils
[NASA-CASE-GSC-11367-1] c44 N74-19692
- POROUS PLATES**
- Method for producing porous tungsten plates for
ionizing cesium compounds for propulsion of
ion engines
[NASA-CASE-XLE-00455] c28 N70-38197
- PORTABLE EQUIPMENT**
- Portable electron beam welding chamber
[NASA-CASE-LEW-11531] c15 N71-14932
- Portable apparatus producing high velocity
annular air column surrounding low velocity,
filtered, superclean air central core for
industrial clean room environmental control
[NASA-CASE-IMP-03212] c15 N71-22721
- Portable cutting machine for piping weld
preparation
[NASA-CASE-XKS-07953] c15 N71-26134
- Method and apparatus for precision sizing and
joining of large diameter tubes by bulging or
constricting overlapping ends
[NASA-CASE-IMP-05114-2] c15 N71-26148
- Portable cryogenic cooling system design
including turbine pump, cooling chamber, and
atomizer

PORTABLE LIFE SUPPORT SYSTEMS

SUBJECT INDEX

- [NASA-CASE-NFO-10467] c23 N71-26654
Automatic controlled drive mechanism for
portable boring bar
[NASA-CASE-XLA-03661] c15 N71-33518
One hand backpack harness
[NASA-CASE-LAR-10102-1] c05 N72-23085
Portable tester for monitoring bacterial
contamination by adenosine triphosphate light
reaction
[NASA-CASE-GSC-10879-1] c14 N72-25413
Portable penetrometer for analyzing soil
characteristics
[NASA-CASE-MFS-20774] c14 N73-19420
Hand-held, lightweight, portable photomicroscope
[NASA-CASE-ARC-10468-1] c14 N73-33361
System for enhancing tool-exchange capabilities
of a portable wrench
[NASA-CASE-MFS-22283-1] c37 N75-33395
Method of peening and portable peening gun
[NASA-CASE-MFS-23047-1] c37 N76-18454
Portable, linear-focused solar thermal energy
collecting system
[NASA-CASE-NFO-13734-1] c44 N76-26690
PORTABLE LIFE SUPPORT SYSTEMS
Portable breathing system
[NASA-CASE-MSC-16182-1] c54 N77-21847
PORTS (OPENINGS)
Sealing evacuation port and evacuating vacuum
container such as space jackets
[NASA-CASE-XMP-03290] c15 N71-23256
POSITION (LOCATION)
Position locating system for remote aircraft
using voice communication and digital signals
[NASA-CASE-GSC-10087-2] c21 N71-13958
Development of telemetry system for position
location and data acquisition
[NASA-CASE-GSC-10083-1] c30 N71-16090
Automatic braking device for rapidly
transferring humans or materials from elevated
location
[NASA-CASE-XKS-C7814] c15 N71-27067
System and method for position locating for air
traffic control involving supersonic transports
[NASA-CASE-GSC-10087-3] c07 N72-12080
Location identification system with ground based
transmitter and aircraft borne receiver/decoder
[NASA-CASE-ERC-10324] c07 N72-25173
System for detecting impact position of cosmic
dust on detector surface
[NASA-CASE-GSC-11291-1] c25 N72-33696
Collimator for analyzing spatial location of
near and distant sources of radiation
[NASA-CASE-MFS-20546-2] c14 N73-30389
Measuring probe position recorder
[NASA-CASE-LAR-10806-1] c35 N74-32877
Vehicle locating system utilizing AM
broadcasting station carriers
[NASA-CASE-NFO-13217-1] c32 N75-26194
Impact position detector for outer space particles
[NASA-CASE-GSC-11829-1] c35 N75-27331
Aircraft-mounted crash-activated transmitter
device
[NASA-CASE-MFS-16609-3] c03 N76-32140
Twin-capacitive shaft angle encoder with analog
output signal
[NASA-CASE-ARC-10897-1] c33 N77-31404
POSITION INDICATORS
Rocket-borne aspect sensor consisting of
radiation sensor, apertured disk, commutator,
and counting circuits
[NASA-CASE-XGS-08266] c14 N69-27432
Characteristics and performance of electrical
system to determine angular rotation
[NASA-CASE-XMP-00447] c14 N70-33179
Magnetic element position sensing device, using
misaligned electromagnets
[NASA-CASE-XGS-07514] c23 N71-16099
Describing angular position and velocity sensing
apparatus
[NASA-CASE-XGS-05680] c14 N71-17585
Mosaic semiconductor radiation detector and
position indicator systems engineering for low
energy particles
[NASA-CASE-XGS-03230] c14 N71-23401
Doppler compensated communication system for
locating supersonic transport position
[NASA-CASE-GSC-10087-4] c07 N73-20174
Meteoroid impact position locator aid for manned
space station
[NASA-CASE-LAR-10629-1] c35 N75-33367
Position determination systems --- using orbital
antenna scan of celestial bodies
[NASA-CASE-MSC-12593-1] c17 N76-21250
POSITIONING
Centering device with ultrafine adjustment for
use with roundness measuring apparatus
[NASA-CASE-XMP-00480] c14 N70-39898
Portable device for aligning surfaces of two
adjacent wall or sheet sections for joining at
point of junction
[NASA-CASE-XMP-01452] c15 N70-41371
Electro-optical/computer system for aligning
large structural members and maintaining
correct position
[NASA-CASE-XMP-02029] c14 N70-41955
Manual control mechanism for adjusting control
rod to null position
[NASA-CASE-XLA-01808] c15 N71-20740
Rotating raster generator
[NASA-CASE-FRC-10071-1] c32 N74-20813
POSITIONING DEVICES (MACHINERY)
Swivel support for gas bearing for position
adjustment between ball and supporting cup
[NASA-CASE-XMP-07808] c15 N71-23812
Caterpillar micropositioner for positioning
machine tools adjacent to workpiece
[NASA-CASE-GSC-10780-1] c14 N72-16283
Positioning mechanism for converting translatory
motion into rotary motion
[NASA-CASE-NFO-10679] c15 N72-21462
Design and development of test stand system for
supporting test items in vacuum chamber
[NASA-CASE-MFS-21362] c11 N73-20267
Method and apparatus for optically monitoring
the angular position of a rotating mirror
[NASA-CASE-GSC-11353-1] c74 N74-21304
Automatic focus control for facsimile cameras
[NASA-CASE-LAR-11213-1] c35 N75-15014
Reference apparatus for medical ultrasonic
transducer
[NASA-CASE-ARC-10753-1] c54 N75-27760
Controlled caging and uncaging mechanism
[NASA-CASE-GSC-11063-1] c37 N77-27400
POSITIVE FEEDBACK
Complementary regenerative transistorized switch
circuit employing positive and negative feedback
[NASA-CASE-XGS-02751] c09 N71-23015
POTABLE WATER
Potable water reclamation from human wastes in
zero-G environment
[NASA-CASE-XLA-03213] c05 N71-11207
Utilization of solar radiation by solar still
for converting salt and brackish water into
potable water
[NASA-CASE-XMS-04533] c15 N71-23086
Chlorine generator for purifying water in life
support systems of manned spacecraft
[NASA-CASE-XLA-08913] c14 N71-28933
Potable water dispenser
[NASA-CASE-MFS-21115-1] c54 N74-12779
Metering gun for dispensing precisely measured
charges of fluid
[NASA-CASE-MFS-21163-1] c54 N74-17853
POTASSIUM SILICATES
Fireproof potassium silicate coating
composition, insoluble in water after
application
[NASA-CASE-GSC-10072] c18 N71-14014
POTENTIOMETERS (INSTRUMENTS)
Two axis flight controller with potentiometer
control shafts directly coupled to rotatable
ball members
[NASA-CASE-XPR-04104] c03 N70-42073
Device for controlling rotary potentiometer
mounted on aircraft steering wheel or aileron
control
[NASA-CASE-IAC-10019] c15 N71-23809
Mechanical function generators with
potentiometer as sensing element
[NASA-CASE-IAC-00001] c15 N71-28952
Angle detector
[NASA-CASE-ARC-11036-1] c35 N77-11364
POTTING COMPOUNDS
Removable potting compound for instrument shock
protection
[NASA-CASE-XLA-00482] c15 N70-36409
Flexible, repairable, pottable composition for
encapsulating electric connectors

[NASA-CASE-XGS-05180] c18 N71-25881
Thermally conductive polymer for potting
electrical components
[NASA-CASE-GSC-11304-1] c06 N72-21105

POWDER METALURGY
Freeze casting of metal ceramic and refractory
compound powders into plastic slips
[NASA-CASE-XLE-00106] c15 N71-16076
Production method for manufacturing porous
tungsten bodies from tungsten powder particles
[NASA-CASE-XNP-04339] c17 N71-29137
Dry electrode manufacture, using silver powder
with cement
[NASA-CASE-FRC-10029-2] c05 N72-25121
Grinding mixtures of powdered metals and inert
fillers for conversion to halide
[NASA-CASE-LEW-10450-1] c15 N72-25448
Superalloys from prealloyed powders at high
temperatures
[NASA-CASE-LEW-10805-1] c15 N73-13465
Method of heat treating a formed powder product
material
[NASA-CASE-LEW-10805-3] c26 N74-10521
Method of forming articles of manufacture from
superalloy powders
[NASA-CASE-LEW-10805-2] c37 N74-13179
Cermet composition and method of fabrication ---
heat resistant alloys and powders
[NASA-CASE-NFO-13120-1] c27 N76-15311

POWER
Nonequilibrium radiation nuclear reactor
[NASA-CASE-HQN-10841-1] c73 N75-22108

POWER AMPLIFIERS
Characteristics of high power, low distortion,
alternating current power amplifier
[NASA-CASE-LAR-10218-1] c09 N70-34559
Power supply with automatic power factor
conversion system
[NASA-CASE-XMS-02159] c10 N71-22961
Solid state broadband stable power amplifier
[NASA-CASE-XNP-10854] c10 N71-26331
High efficiency transformerless amplitude
modulator coupled to RF power amplifier
[NASA-CASE-GSC-10668-1] c07 N71-28430
Isolated output system for a class D
switching-mode amplifier
[NASA-CASE-MFS-21616-1] c33 N75-30429

POWER EFFICIENCY
Low power drain transistor feedback circuit
[NASA-CASE-XGS-04999] c09 N69-24317
Excitation and detection circuitry for flux
responsive magnetic head
[NASA-CASE-XNP-04183] c09 N69-24329
Increasing available power per unit area in ion
rocket engine by increasing beam density
[NASA-CASE-XLE-00519] c28 N70-41576
Absorbing gas reactivity control system for
minimizing power distribution and perturbation
in nuclear reactors
[NASA-CASE-XLE-04599] c22 N72-20597
Remote platform power conserving system
[NASA-CASE-GSC-11182-1] c15 N75-13007

POWER GAIN
Serrordyne traveling wave tube reentrant
amplifier for synchronous communication
satellites operating at microwave frequencies
[NASA-CASE-XGS-01022] c07 N71-16088
Switching circuit for control of cathode ray
tube beam with fast rise time for output signal
[NASA-CASE-KSC-10647-1] c10 N72-31273

POWER LIMITERS
Monostable multivibrator for conserving power in
spacecraft systems
[NASA-CASE-GSC-10082-1] c10 N72-20221

POWER LINES
Patent data on terminal insert connector for
flat electric cables
[NASA-CASE-XNP-00324] c09 N70-34596
Motor run-up system --- power lines
[NASA-CASE-NFO-13374-1] c33 N75-19524
Cable fault locator
[NASA-CASE-KSC-10899-1] c33 N77-28394

POWER SERIES
Describing circuit for obtaining sum of squares
of numbers
[NASA-CASE-XGS-04765] c08 N71-18693
Phase modulating with odd and even finite power
series of a modulating signal
[NASA-CASE-LAR-11607-1] c32 N77-14292

POWER SPECTRA
Method and apparatus for high resolution power
spectrum analysis
[NASA-CASE-NFO-10748] c08 N72-20177

POWER SUPPLIES
Tape recorder designed for low power consumption
and resistance to operational failure under
high stress conditions
[NASA-CASE-XGS-08259] c14 N71-23698
Current dependent variable inductance for input
filter chokes of ac or dc power supplies
[NASA-CASE-EBC-10139] c09 N72-17154
Performance of ac power supply developed for CO2
laser system
[NASA-CASE-GSC-11222-1] c16 N73-32391
High voltage distributor
[NASA-CASE-GSC-11849-1] c33 N76-16332

POWER SUPPLY CIRCUITS
Regulated dc to dc converter
[NASA-CASE-XGS-03429] c03 N69-21330
Power control switching circuit using low
voltage semiconductor controlled rectifiers
for high voltage isolation
[NASA-CASE-XNP-02713] c10 N69-39888
Increasing power conversion efficiency of
electronic amplifiers by power supply switching
[NASA-CASE-XMS-00945] c09 N71-10798
Electric power system utilizing thermionic
plasma diodes in parallel and heat pipes as
cathodes
[NASA-CASE-XNP-05843] c03 N71-11055
Pulsed energy power system for application of
combustible gases to turbine controlling ac
voltage generator
[NASA-CASE-MSC-13112] c03 N71-11057
Data processor having multiple sections
activated at different times by selective
power coupling to sections
[NASA-CASE-XGS-04767] c08 N71-12494
Microwave power receiving antenna solving heat
dissipation problems by construction of
elements as heat pipe devices
[NASA-CASE-MFS-20333] c09 N71-13486
Design, development, and operating principles of
power supply with starting circuit which is
independent of voltage regulator
[NASA-CASE-XMS-01991] c09 N71-21449
Power supply with automatic power factor
conversion system
[NASA-CASE-XMS-02159] c10 N71-22961
Electric circuit for reversing direction of
current flow
[NASA-CASE-XNP-00952] c10 N71-23271
Power supply with overload protection for series
stage transistor
[NASA-CASE-XMS-00913] c10 N71-23543
Automatic power supply circuit design for
driving inductive loads and minimizing power
consumption including solenoid example
[NASA-CASE-NFO-10716] c09 N71-24892
Unsaturating magnetic core transformer design
with warning signal for electrical power
processing equipment
[NASA-CASE-EBC-10125] c09 N71-24893
Device for monitoring voltage by generating
signal when voltages drop below predetermined
value
[NASA-CASE-KSC-10020] c10 N71-27338
Power point tracker for maintaining optimal
output voltage of power source
[NASA-CASE-GSC-10376-1] c14 N71-27407
Microwave power divider for providing variable
output power to output waveguide in fixed
waveguide system
[NASA-CASE-NFO-11031] c07 N71-33606
Circuit for monitoring power supply by ripple
current indication
[NASA-CASE-KSC-10162] c09 N72-11225
Dc to ac to dc converter with transistor driven
synchronous rectifiers
[NASA-CASE-GSC-11126-1] c09 N72-25253
LC-oscillator with automatic stabilized
amplitude via bias current control --- power
supply circuit for transducers
[NASA-CASE-MFS-21698-1] c33 N74-26734
Integrable power gyrator --- with Z-matrix
design using parallel transistors
[NASA-CASE-MFS-22342-1] c33 N75-30426

- Control for nuclear thermionic power source ---
power supply circuits, energy policy
[NASA-CASE-NPO-13114-2] c44 N76-15573
- The dc-to-dc converters employing
staggered-phase power switches with two-loop
control
[NASA-CASE-NPO-13512-1] c33 N77-10428
- Overload protection system for power inverter
[NASA-CASE-NPO-13872-1] c33 N77-17359
- Circuit for automatic load sharing in parallel
converter modules
[NASA-CASE-NPO-14056-1] c33 N77-32402
- PRECSSION**
- Dynamic precession damping of spin-stabilized
vehicles by using rate gyroscope and angular
accelerometer
[NASA-CASE-XIA-01989] c21 N70-34295
- PRECIPITATION (CHEMISTRY)**
- Production of pure metals
[NASA-CASE-LFW-10906-1] c25 N74-30502
- PRECISION**
- Precision stepping drive device using cam disk
[NASA-CASE-MFS-14772] c15 N71-17692
- Method and apparatus for precision sizing and
joining of large diameter tubes by bulging or
constricting overlapping ends
[NASA-CASE-XMF-05114-2] c15 N71-26148
- PREFLIGHT OPERATIONS**
- Automatic balancing device for use on
frictionless supported attitude-controlled
test platforms
[NASA-CASE-LAR-10774] c10 N71-13545
- PRELAUNCH TESTS**
- Low loss parasitic probe antenna for prelaunch
tests of spacecraft antennas
[NASA-CASE-XKS-09348] c09 N71-13521
- Digital computer system for automatic prelaunch
checkout of spacecraft
[NASA-CASE-XKS-08012-2] c31 N71-15566
- PREPOLYMERS**
- Carboxyl terminated polyester prepolymers and
foams produced from prepolymers and materials
[NASA-CASE-NPO-1C596] c06 N71-25929
- PRESSURE**
- Strain gage mounting assembly
[NASA-CASE-NPO-13170-1] c35 N76-14430
- PRESSURE CHAMBERS**
- Triggering system for electric arc driven
impulse wind tunnel
[NASA-CASE-XMF-00411] c11 N70-36913
- Whole body measurement systems --- for
weightlessness simulation
[NASA-CASE-MSC-13972-1] c52 N74-10975
- Accumulator
[NASA-CASE-MFS-19287-1] c34 N77-30399
- PRESSURE DISTRIBUTION**
- Piston device for producing known constant
positive pressure within lungs by using
thoracic muscles
[NASA-CASE-XMS-01615] c05 N70-41329
- Preventing pressure buildup in electrochemical
cells by reacting palladium oxide with evolved
hydrogen
[NASA-CASE-XGS-01419] c03 N70-41864
- Accumulator
[NASA-CASE-MFS-19287-1] c34 N77-30399
- A seat cushion to provide realistic acceleration
cues for aircraft simulator pilots
[NASA-CASE-LAR-12149-1] c54 N77-31787
- PRESSURE DROP**
- Leak detector
[NASA-CASE-MFS-21761-1] c35 N75-15931
- PRESSURE EFFECTS**
- System for stabilizing cable phase delay
utilizing a coaxial cable under pressure
[NASA-CASE-NPO-13138-1] c33 N74-17927
- Evacuated, displacement compression mold --- of
tubular bodies from thermosetting plastics
[NASA-CASE-LAR-10782-2] c31 N75-13111
- Internally supported flexible duct joint ---
device for conducting fluids in high pressure
systems
[NASA-CASE-MFS-19193-1] c37 N75-19686
- PRESSURE GAGES**
- Differential pressure cell insensitive to
changes in ambient temperature and extreme
overload
[NASA-CASE-XAC-00042] c14 N70-34816
- Blood pressure measuring system for separately
recording dc and ac pressure signals of
Korotkoff sounds
[NASA-CASE-XMS-06061] c05 N71-23317
- Control system for pressure balance device used
in calibrating pressure gages
[NASA-CASE-XMF-04134] c14 N71-23755
- Improved McLeod gage for pressure measurement
[NASA-CASE-XAC-04458] c14 N71-24232
- Ultrahigh vacuum gauge with two collector
electrodes
[NASA-CASE-LAR-02743] c14 N73-32324
- PRESSURE GRADIENTS**
- Positive displacement flowmeter for measuring
extremely low flows of fluid with self
calibrating features
[NASA-CASE-XMF-02822] c14 N70-41994
- PRESSURE MEASUREMENTS**
- Design and development of inertia diaphragm
pressure transducer
[NASA-CASE-XAC-02981] c14 N71-21072
- Design and development of pressure sensor for
measuring differential pressures of few pounds
per square inch
[NASA-CASE-XMF-01974] c14 N71-22752
- Improved McLeod gage for pressure measurement
[NASA-CASE-XAC-04458] c14 N71-24232
- Coherent light beam device and method for
measuring gas density in vacuum chambers
[NASA-CASE-XER-11203] c14 N71-28994
- Design, development, and characteristics of
pressure and temperature sensor operating
immersed in fluid flow
[NASA-CASE-LFW-10281-1] c14 N72-17327
- Calibration of vacuum gauges for measuring total
and partial pressures in ultrahigh vacuum region
[NASA-CASE-XGS-07752] c14 N73-30390
- Absolute pressure measuring device for measuring
gas density level in high vacuum range
[NASA-CASE-LAR-10000] c14 N73-30394
- Wind tunnel model and method
[NASA-CASE-LAR-10812-1] c09 N74-17955
- Indicated mean effective pressure instrument
(IMEP)
[NASA-CASE-LFW-12661-1] c35 N77-32461
- PRESSURE REDUCTION**
- Relief valve to permit slow and fast bleeding
rates at difference pressure levels
[NASA-CASE-XMS-05894-1] c15 N69-21924
- Sealed electric storage battery with gas
manifold interconnecting each cell
[NASA-CASE-XMF-03378] c03 N71-11051
- Depressurization of arc lamps
[NASA-CASE-NPO-10790-1] c33 N77-21316
- PRESSURE REGULATORS**
- Pressure regulating system with high pressure
fluid source, adapted to maintain constant
downstream pressure
[NASA-CASE-XMF-00450] c15 N70-38603
- Pulmonary resuscitation method and apparatus
with adjustable pressure regulator
[NASA-CASE-XMS-01115] c05 N70-39922
- Structural design of high pressure regulator valve
[NASA-CASE-XMF-00710] c15 N71-10778
- Space suit with pressure-volume compensator system
[NASA-CASE-XLA-05332] c05 N71-11194
- Portable environmental control and life support
system for astronaut in and out of spacecraft
[NASA-CASE-XMS-09632-1] c05 N71-11203
- Antibacklash circuit for hydraulic drive system
[NASA-CASE-XMF-01020] c03 N71-12260
- High impact pressure regulator having minimum
number of lightweight movable elements
[NASA-CASE-NPO-10175] c14 N71-18625
- Pressure regulator for space suit worn
underwater to simulate space environment for
testing and experimentation
[NASA-CASE-MFS-20332] c05 N72-20097
- Underwater space suit pressure control regulator
[NASA-CASE-MFS-20332-2] c05 N73-25125
- Combined pressure regulator and shutoff valve
[NASA-CASE-NPO-13201-1] c37 N75-15050
- Flow compensating pressure regulator --- for
ophthalmic applications
[NASA-CASE-LFW-12718-1] c35 N77-20408
- Pressure modulating valve
[NASA-CASE-MSC-14905-1] c37 N77-28487
- PRESSURE SENSORS**
- Fabrication of pressure-telemetry transducers

- [NASA-CASE-XNP-09752] c14 N69-21541
Pressure probe for sensing ambient static air pressures
- [NASA-CASE-XLA-00481] c14 N70-36824
Ambient atmospheric pressure sensing device for determining altitude of flight vehicles
- [NASA-CASE-XLA-00128] c15 N70-37925
Dynamic sensor for gas pressure or density measurement
- [NASA-CASE-XMF-02877] c14 N70-41681
Design and development of inertia diaphragm pressure transducer
- [NASA-CASE-XAC-02981] c14 N71-21072
Design and development of pressure sensor for measuring differential pressures of few pounds per square inch
- [NASA-CASE-XMF-01974] c14 N71-22752
Combination pressure transducer-calibrator assembly for measuring fluid
- [NASA-CASE-XNP-01660] c14 N71-23036
Pressure sensor network for measuring liquid dynamic response in flight including fuel tank acceleration, liquid slosh amplitude, and fuel depth monitoring
- [NASA-CASE-XLA-05541] c12 N71-26387
Miniature electromechanical junction transducer operating on piezoelectric effect and utilizing epoxy for stress coupling component
- [NASA-CASE-ERC-10087] c14 N71-27334
Method for making pressurized meteoroid penetration detector panels
- [NASA-CASE-XLA-08916] c15 N71-29018
Design, development, and characteristics of pressure and temperature sensor operating immersed in fluid flow
- [NASA-CASE-LFW-10281-1] c14 N72-17327
Pressure transducer for systems for measuring forces of compression
- [NASA-CASE-NFO-10832] c14 N72-21405
Pressure operated electrical switch responsive to pressure decrease after pressure increase
- [NASA-CASE-LAR-10137-1] c09 N72-22204
Wide range dynamic pressure sensor with vibrating diaphragm for measuring density and pressure of gaseous environment
- [NASA-CASE-ARC-10263-1] c14 N72-22438
Development of differential pressure control system using notion of mechanical diaphragms to operate electric switch
- [NASA-CASE-MFS-14216] c14 N73-13418
System for calibrating pressure transducer
- [NASA-CASE-LAR-10910-1] c35 N74-13132
Stagnation pressure probe --- for measuring pressure of supersonic gas streams
- [NASA-CASE-LAR-11139-1] c35 N74-32878
Circuit for detecting initial systole and diastolic notch --- for monitoring arterial pressure
- [NASA-CASE-LFW-11581-1] c54 N75-13531
Leak detector
- [NASA-CASE-MFS-21761-1] c35 N75-15931
Measurement of gas production of microorganisms --- using pressure sensors
- [NASA-CASE-LAR-11326-1] c35 N75-33368
Static pressure probe
- [NASA-CASE-LAR-11552-1] c35 N76-14429
Trielectrode capacitive pressure transducer
- [NASA-CASE-ARC-10711-2] c33 N76-21390
Catheter tip force transducer for cardiovascular research
- [NASA-CASE-NFO-13643-1] c52 N76-29896
Miniature biaxial strain transducer
- [NASA-CASE-LAR-11648-1] c35 N77-14407
Optically selective, acoustically resonant gas detecting transducer
- [NASA-CASE-ARC-10639-1] c35 N77-19388
- PRESSURE SUITS**
- Helmet and torso tie-down mechanism for shortening pressure suits upon inflation
- [NASA-CASE-XMS-00784] c05 N71-12335
Design and development of flexible joint for pressure suits
- [NASA-CASE-XMS-09636] c05 N71-12344
Cord restraint system for pressure suit joints
- [NASA-CASE-XMS-09635] c05 N71-24623
Development of improved convolute section for pressurized suits to provide high degree of mobility in response to minimum of applied torque
- [NASA-CASE-XMS-09637-1] c05 N71-24730
Fabrication of root cord restrained fabric suit sections from sheets of fabric
- [NASA-CASE-MSC-12398] c05 N72-20098
Restraint torso for increased mobility and reduced physiological effects while wearing pressurized suits
- [NASA-CASE-MSC-12397-1] c05 N72-25119
Flexible joint for pressurizable garment
- [NASA-CASE-MSC-11072] c54 N74-32546
A walking boot assembly
- [NASA-CASE-ARC-11101-1] c54 N77-14742
- PRESSURE SWITCHES**
- Reinforcing beam system for highly flexible diaphragms in valves or pressure switches
- [NASA-CASE-XNP-01962] c32 N70-41370
- PRESSURE VESSELS**
- Liquid rocket systems for propulsion and control of spacecraft
- [NASA-CASE-XNP-00610] c28 N70-36910
Thin walled pressure test vessel using low-melting alloy-filled joint to attach shell to heads
- [NASA-CASE-XLE-04677] c15 N71-10577
Control of gas flow from pressurized vessel by thermal expansion of metal plug
- [NASA-CASE-NFO-10298] c12 N71-17661
Method and apparatus for inducing compressive stresses in pressure vessel to prevent stress corrosion
- [NASA-CASE-XLA-07390] c15 N71-18616
Heater-mixer for stored fluids
- [NASA-CASE-ARC-10442-1] c35 N74-15093
Method and apparatus for nondestructive testing of pressure vessels
- [NASA-CASE-NFO-12142-1] c38 N76-28563
- PRESSURE WELDING**
- Diffusion welding --- heat treatment of nickel alloys following single step vacuum welding process
- [NASA-CASE-LFW-11388-2] c37 N74-21055
- PRESTRESSING**
- Prestressed rocket nozzle with ceramic inner rings and refractory metal outer rings
- [NASA-CASE-XNP-02888] c18 N71-21068
- PRETREATMENT**
- Anti-wettable materials brazing processes using titanium and zirconium for surface pretreatment
- [NASA-CASE-XMS-03537] c15 N69-21471
- PRINTED CIRCUITS**
- Electrical feedthrough connection for printed circuit boards
- [NASA-CASE-XMF-01483] c14 N69-27431
Electric connector for printed cable to printed cable or to printed board
- [NASA-CASE-XMF-00369] c09 N70-36494
Electrical connection for printed circuits on common board, using bellows principle in rivet
- [NASA-CASE-XNP-05082] c15 N70-41960
Electrical spot terminal assembly for printed circuit boards
- [NASA-CASE-NFO-10034] c15 N71-17685
Solder coating process for printed copper circuit protection
- [NASA-CASE-XMF-01599] c09 N71-20705
Handling tool for printed circuit cards
- [NASA-CASE-MFS-20453] c15 N71-29133
Development and characteristics of polyimide impregnated laminates with fiberglass cloth backing for application as printed circuit boards
- [NASA-CASE-MFS-20408] c18 N73-12604
Techniques for packaging and mounting printed circuit boards
- [NASA-CASE-MFS-21919-1] c10 N73-25243
Device for configuring multiple leads --- method for connecting electric leads to printed circuit board
- [NASA-CASE-MFS-22133-1] c33 N74-26977
Connector --- for connecting circuits on different layers of multilayer printed circuit boards
- [NASA-CASE-LAR-11709-1] c37 N76-27567
Controlled caging and uncaging mechanism
- [NASA-CASE-GSC-11063-1] c37 N77-27400
A solar array strip and a method for forming the same
- [NASA-CASE-NFO-13652-1] c44 N77-28585

PRINTING

SUBJECT INDEX

PRINTING

Application of semiconductor diffusants to solar cells by screen printing
[NASA-CASE-LEW-12775-1] c44 N77-24589

PRINTOUTS

Handling tool for printed circuit cards
[NASA-CASE-MFS-20453] c15 N71-29133

PRISMS

Interferometer prism and control system for precisely determining direction to remote light source
[NASA-CASE-ARC-10278-1] c14 N73-25463

PROBES

Method and apparatus for connecting two spacecraft with probe of one inserted in rocket engine nozzle of other spacecraft
[NASA-CASE-MFS-11133] c31 N71-16222

Development of droplet monitoring probe for use in analysis of droplet propagation in mixed-phase fluid stream
[NASA-CASE-NFO-10985] c14 N73-20478

PRODUCT DEVELOPMENT

Using molds for fabricating individual fluid circuit components
[NASA-CASE-XLA-07829] c15 N72-16329

Process for developing filament reinforced plastic tubes used in research and development programs
[NASA-CASE-LAR-10203-1] c15 N72-16330

Simplified technique and device for producing industrial grade synthetic diamonds
[NASA-CASE-MFS-20698-2] c15 N73-19457

High power laser apparatus and system
[NASA-CASE-XLE-2529-2] c36 N75-27364

Ceramic fiber insulating material and methods of producing same --- product development of foams for thermal insulation
[NASA-CASE-MSC-14795-1] c27 N76-15314

Spherical bearing
[NASA-CASE-MFS-23447-1] c37 N77-11403

PRODUCTION ENGINEERING

Standard coupling design for mass production
[NASA-CASE-XMS-02532] c15 N70-41808

Fabrication of curved reflector segments for solar mirror
[NASA-CASE-XLE-08917] c15 N71-15597

Production of barium fluoride-calcium fluoride composite lubricant for bearings or seals
[NASA-CASE-XLE-08511-2] c18 N71-16105

Fabrication of sintered impurity semiconductor brushes for electrical energy transfer
[NASA-CASE-XMP-01016] c26 N71-17818

Technique for making foldable, inflatable, plastic honeycomb core panels for use in building and bridge structures, light and radio wave reflectors, and spacecraft
[NASA-CASE-XLA-03492] c15 N71-22713

Multilayer porous refractory metal ionizer design with thick, porous, large-grain substrates and thin, porous micron-grain substrates
[NASA-CASE-XMP-04338] c17 N71-23046

Permanently magnetized ion engine casing construction for use in spacecraft propulsion systems
[NASA-CASE-XMP-06942] c28 N71-23293

Dry electrode design with wire sandwiched between two flexible conductive discs for monitoring physiological responses
[NASA-CASE-FRC-10029] c09 N71-24618

Production method of star tracking reticles for transmitting in visible and near ultraviolet regions
[NASA-CASE-GSC-11188-1] c14 N73-32320

Process for baking sheets with parallel pores of uniform size
[NASA-CASE-GSC-10984-1] c37 N75-26371

Strong thin semitrans structure
[NASA-CASE-NFO-14021-1] c27 N77-32313

PROJECTILES

Self-obturator gas-operated launcher for launching projectiles in decontaminated medium
[NASA-CASE-NFO-11013] c11 N72-22247

Two stage light gas-plasma projectile accelerator
[NASA-CASE-MFS-22287-1] c75 N76-14931

PROJECTION

Projection system for display of parallax and perspective
[NASA-CASE-MFS-23194-1] c74 N76-13909

PROJECTIVE GEOMETRY

Projection system for display of parallax and perspective
[NASA-CASE-MFS-23194-1] c74 N76-13909

PROJECTORS

Optical projector system for establishing optimum arrangement of instrument displays in aircraft, spacecraft, other vehicles, and industrial instrument consoles
[NASA-CASE-XMP-03853] c23 N71-21882

PROPAGATION MODES

Dual waveguide mode source for controlling amplitudes of two modes
[NASA-CASE-XMP-03134] c07 N71-10676

PROPELLANT BINDERS

Chemical process for production of polyisobutylene compounds and application as solid rocket propellant binder
[NASA-CASE-NFO-10893] c27 N73-22710

PROPELLANT CASTING

Casting propellant in rocket engine
[NASA-CASE-LAR-11995-1] c28 N77-10213

Solid propellant rocket motor and method of making same
[NASA-CASE-XLA-1349] c20 N77-17143

PROPELLANT COMBUSTION

Spherical solid propellant rocket engine having abrupt burnout
[NASA-CASE-XHQ-01897] c28 N70-35381

Rocket combustion chamber stability by controlling transverse instability during propellant combustion
[NASA-CASE-XLE-04603] c33 N71-21507

PROPELLANT DECOMPOSITION

Unit for generating thrust from catalytic decomposition of hydrogen peroxide, for high altitude aircraft or spacecraft reaction control
[NASA-CASE-XMS-00583] c28 N70-38504

PROPELLANT GRAINS

Grain configuration for solid propellant rocket engines
[NASA-CASE-XGS-03556] c27 N70-35534

PROPELLANT TANKS

Liquid rocket systems for propulsion and control of spacecraft
[NASA-CASE-XMP-00610] c28 N70-36910

Slosh damping method for liquid rocket propellant tanks
[NASA-CASE-XMP-00658] c12 N70-38997

Expulsion and measuring device for determining quantity of liquid in tank under conditions of weightlessness
[NASA-CASE-XMS-01546] c14 N70-40233

Collapsible auxiliary tank for restarting liquid propellant rocket motors under zero gravity
[NASA-CASE-XMP-01390] c28 N70-41275

Liquid propellant tank design with semitoroidal bulkhead
[NASA-CASE-XMP-01899] c31 N70-41948

Microleak detector mounted on weld seam of propellant tank of launch vehicle
[NASA-CASE-XMP-02307] c14 N71-10779

Fabrication of filament wound propellant tank for cryogenic storage
[NASA-CASE-XLE-03803-2] c15 N71-17651

Slosh and swirl alleviator for liquid propellant tanks during transport and flight
[NASA-CASE-XLA-05749] c15 N71-19569

Two phase fluid pressurization system for propellant tank
[NASA-CASE-MSC-12390] c27 N71-29155

Space vehicle system
[NASA-CASE-MSC-12561-1] c18 N76-17185

PROPELLANT TRANSFER

Two component valve assembly for cryogenic liquid transfer regulation
[NASA-CASE-XLE-00397] c15 N70-36492

Apparatus for cryogenic liquid storage with heat transfer reduction and for liquid transfer at zero gravity conditions
[NASA-CASE-XLE-00345] c15 N70-38020

Continuous variation of propellant flow and thrust by application of liquid foam flow theory to injection orifice
[NASA-CASE-XLE-00177] c28 N70-40367

Method and feed system for separating and orienting liquid and vapor phases of liquid propellants in zero gravity environment
[NASA-CASE-XLE-01182] c27 N71-15635

Electron bombardment ion rocket engine with improved propellant introduction system
[NASA-CASE-XLE-02066] c28 N71-15661

Rocket combustion chamber stability by controlling transverse instability during propellant combustion
[NASA-CASE-XLF-04603] c33 N71-21507

Vapor-liquid separator design with vapor driven pump for separated liquid pumping for application in propellant transfer
[NASA-CASE-IXF-04042] c15 N71-23023

Filler valve design for supplying liquid propellants at high pressure to space vehicles
[NASA-CASE-IXF-01747] c15 N71-23024

Internal labyrinth and shield structure to improve electrical isolation of propellant feed source from ion thruster
[NASA-CASE-LFW-0210-1] c28 N71-26781

Flexible bellows joint shielding sleeve for propellant transfer pipelines
[NASA-CASE-IXF-01855] c15 N71-28937

PROPELLER BLADES

Directed fluid stream for propeller blade loading control
[NASA-CASE-IXC-00139] c02 N70-34856

PROPORTIONAL CONTROL

Proportional controller for regulating aircraft or spacecraft motion about three axes
[NASA-CASE-IXC-03392] c03 N70-41954

PROPULSION SYSTEM CONFIGURATIONS

Electrothermal rocket engine using resistance heated heat exchanger
[NASA-CASE-XLE-00267] c28 N70-33356

Grain configuration for solid propellant rocket engines
[NASA-CASE-XGS-03556] c27 N70-35534

Shrouded composite propulsion system configuration
[NASA-CASE-XLA-01043] c28 N71-10780

Electrostatic microthrust propulsion system with annular slit colloid thruster
[NASA-CASE-GSC-10709-1] c28 N71-25213

Method and apparatus for pressurizing propellant tanks used in propulsion motor feed system
[NASA-CASE-IXF-00650] c27 N71-28929

PROSTHETIC DEVICES

Prosthetic limb with tactile sensing device
[NASA-CASE-MFS-16570-1] c05 N73-32013

Orthotic arm joint --- for use in mechanical arms
[NASA-CASE-MFS-21611-1] c54 N75-12616

Graphite reinforced bone cement
[NASA-CASE-NFO-13764-1] c24 N76-26281

An artificial leg employing a mechanical energy storage device for hip disarticulation
[NASA-CASE-ABC-10916-1] c54 N76-26871

Actuator device for artificial leg
[NASA-CASE-MFS-23225-1] c52 N77-14735

Aldehyde-containing urea-absorbing polysaccharides
[NASA-CASE-NFO-13620-1] c27 N77-30236

Potential joint assembly for the prosthetic leg
[NASA-CASE-KSC-11004-1] c54 N77-30749

Compact artificial hand
[NASA-CASE-NFO-13906-1] c54 N77-32723

PROTECTION

Camera protecting device for use in photographing rocket engine nozzles or other engine components
[NASA-CASE-NFO-10174] c14 N71-18465

Fiber modified polyurethane foam for ballistic protection
[NASA-CASE-ABC-10714-1] c27 N76-15310

PROTECTIVE CLOTHING

Conditioning tanned sharkskin for use as abrasive resistant clothing
[NASA-CASE-IXS-09691-1] c18 N71-15545

One piece human garment for use as contamination proof garment
[NASA-CASE-MSC-12206-1] c05 N71-17599

Thermoregulating with cooling flow pipe network for humans
[NASA-CASE-IXS-10269] c05 N71-24147

Development of improved convolute section for pressurized suits to provide high degree of mobility in response to minimum of applied torque
[NASA-CASE-IXS-05637-1] c05 N71-24730

Voice operated receiving and transmitting system for use in protective suits
[NASA-CASE-KSC-10164] c07 N71-33108

PROTECTIVE COATINGS

Process permitting application of synthetic resin coating to irregular-shaped objects at ambient temperature
[NASA-CASE-IXF-06508] c18 N69-39895

Ultraviolet radiation resistant alkali-metal silicate coatings for temperature control of spacecraft
[NASA-CASE-XGS-04119] c18 N69-39979

Application techniques for protecting materials during salt bath brazing
[NASA-CASE-XLE-00046] c15 N70-33311

Removable potting compound for instrument shock protection
[NASA-CASE-XLA-00482] c15 N70-36409

Passive thermal control coating on aluminum foil laminate for inflatable spacecraft surfaces
[NASA-CASE-XLA-01291] c33 N70-36617

Using ethylene oxide in preparation of sterilized solid rocket propellants and encapsulating materials
[NASA-CASE-IXF-01749] c27 N70-41897

Fireproof potassium silicate coating composition, insoluble in water after application
[NASA-CASE-GSC-10072] c18 N71-14014

Development of bacteriostatic conformal coating and methods of application
[NASA-CASE-GSC-10007] c18 N71-16046

Vapor deposited laminated nitride-silicon coating for corrosion prevention of carbonaceous surfaces
[NASA-CASE-XLA-00284] c15 N71-16075

Flame or plasma spraying for molybdenum coating of carbon or graphite surfaces to prevent oxidative corrosion
[NASA-CASE-XLA-00302] c15 N71-16077

Development and characteristics of protective coatings for spacecraft
[NASA-CASE-IXF-02507] c31 N71-17679

Development of thermal insulation system for wing and control surfaces of hypersonic aircraft and reentry vehicles
[NASA-CASE-XLA-00892] c33 N71-17897

Bismuth and lead surface coatings for gas bearings in aerospace engineering
[NASA-CASE-XGS-02011] c15 N71-20739

Composition and production method of alkali metal silicate paint with ultraviolet reflection properties
[NASA-CASE-XGS-04799] c18 N71-24183

Method for treating metal surfaces to prevent secondary electron transmission
[NASA-CASE-IXF-09469] c24 N71-25555

Development of solid state polymer coating for obtaining thermal balance in spacecraft components
[NASA-CASE-XLA-01745] c33 N71-28903

Method for coating through-holes in ceramic substrates used in fabricating miniaturized electronic circuits
[NASA-CASE-IXF-05999] c15 N71-29032

Zinc dust formulation for abrasion resistant steel coatings
[NASA-CASE-GSC-10361-1] c18 N72-23581

Development of process for constructing protective covers for solar cells
[NASA-CASE-GSC-11514-1] c03 N72-24037

Resin for protecting p-n semiconductor junction surface
[NASA-CASE-ERC-10339-1] c18 N73-30532

Nonflammable coating compositions --- for use in high oxygen environments
[NASA-CASE-MFS-20486-2] c27 N74-17283

Fused silicide coatings containing discrete particles for protecting niobium alloys --- used in space shuttle thermal protection systems and turbine engine components
[NASA-CASE-LBW-11179-1] c27 N76-16229

Thermal barrier coating system
[NASA-CASE-LBW-12554-1] c24 N76-23359

Extreme temperature thermal control coating
[NASA-CASE-LAR-11756-1] c24 N76-26284

Reaction cured glass and glass coatings
[NASA-CASE-ABC-11051-1] c27 N77-10201

Intumescent coating containing 4,4'-dinitrosulfanilide
[NASA-CASE-ABC-11042-1] c24 N77-11119

High temperature oxidation resistant cernet compositions
[NASA-CASE-NFO-13666-1] c27 N77-13217

Intumescent-ablator coatings using endothermic fillers
[NASA-CASE-ARC-11043-1] c34 N77-14372

Sprayable low density ablator
[NASA-CASE-MFS-23506-1] c24 N77-15105

Leading edge protection for composite blades
[NASA-CASE-LFW-12550-1] c24 N77-19170

Apparatus for automatically spraying a coating material
[NASA-CASE-MFS-23506-2] c37 N77-20441

Durable antistatic coating for polymethylmethacrylate
[NASA-CASE-NFO-13867-1] c27 N77-22257

Abrasion resistant coatings for plastic surfaces
[NASA-CASE-ARC-10915-3] c24 N77-24200

PROTECTORS

Load cell protection device using spring-loaded breakaway mechanism
[NASA-CASE-XMS-06782] c32 N71-15974

Payload soft landing system using stowable gas bag
[NASA-CASE-XLA-09881] c31 N71-16085

PROTEINS

Protein sterilization of firefly luciferase without denaturation
[NASA-CASE-GSC-10225-1] c06 N73-27086

PROTON FLUX DENSITY

Flame detector operable in presence of proton radiation
[NASA-CASE-MFS-21577-1] c19 N74-29410

PSEUDONOISE

System designed to reduce time required for obtaining synchronization in data communication with spacecraft utilizing pseudonoise codes
[NASA-CASE-NPO-10214] c10 N71-26577

Linear shift register with feedback logic for generating pseudonoise linear recurring binary sequences
[NASA-CASE-NPO-11406] c08 N73-12175

Multicarrier communications system for transmitting modulated signals from single transmitter
[NASA-CASE-NFO-11548] c07 N73-26118

Pseudo-noise test set for communication system evaluation --- test signals
[NASA-CASE-MFS-22671-1] c35 N75-21582

PULLEYS

Apparatus for measuring load on cable under static or dynamic conditions comprising pulleys pivoting structure against restraint of tension strap
[NASA-CASE-XMS-04545] c15 N71-22878

Tensile strength testing device having pulley guides for exerting multiple forces on test specimen
[NASA-CASE-INP-05634] c15 N71-24834

PULMONARY CIRCULATION

Pulmonary resuscitation method and apparatus with adjustable pressure regulator
[NASA-CASE-XMS-01115] c05 N70-39922

PULMONARY FUNCTIONS

Piston device for producing known constant positive pressure within lungs by using thoracic muscles
[NASA-CASE-XMS-01615] c05 N70-41329

PULSE AMPLITUDE

Monitoring system for signal amplitude ranges over predetermined time interval
[NASA-CASE-XMS-04061-1] c09 N69-39885

Analog to digital converter for converting pulses to frequencies
[NASA-CASE-XLA-00670] c08 N71-12501

Electrical testing apparatus for detecting amplitude and width of transient pulse
[NASA-CASE-INP-06519] c09 N71-12519

Analog to digital converter circuit for pulse height analysis
[NASA-CASE-INP-00477] c08 N73-28045

Electro-mechanical sine/cosine generator
[NASA-CASE-LAR-11389-1] c33 N77-26387

Speech analyzer
[NASA-CASE-GSC-11898-1] c32 N77-30309

PULSE AMPLITUDE MODULATION

Voltage controlled oscillators and pulse amplitude modulation for signal ratio system
[NASA-CASE-INP-04367] c09 N71-23545

PULSE CODE MODULATION

Adaptive compression signal processor for PCM communication systems
[NASA-CASE-XLA-03076] c07 N71-11266

Bipolar phase detector and corrector for split phase PCM data signals
[NASA-CASE-IGS-01590] c07 N71-12392

System for recording and reproducing PCM data from data stored on magnetic tape
[NASA-CASE-IGS-01021] c08 N71-21042

Frequency shift keying apparatus for use with pulse code modulation data transmission system
[NASA-CASE-IGS-01537] c07 N71-23405

Data reduction and transmission system for TV PCM data
[NASA-CASE-NFO-11243] c07 N72-20154

Pulse code modulated data from frequency multiplex communications by digital phase shift or carrier
[NASA-CASE-NFO-11338] c08 N72-25208

Bit synchronization of PCM communications signal, without separate synchronization channel by digital correlation
[NASA-CASE-NFO-11302-1] c07 N73-13149

Method and apparatus for a single channel digital communications system --- synchronization of received PCM signal by digital correlation with reference signal
[NASA-CASE-NFO-11302-2] c32 N74-10132

Multifunction audio digitizer --- producing direct delta and pulse code modulation
[NASA-CASE-MSC-13855-1] c35 N74-17885

Pulse code modulated signal synchronizer
[NASA-CASE-MSC-12462-1] c32 N74-20809

Pulse code modulated signal synchronizer
[NASA-CASE-MSC-12494-1] c32 N74-20810

Digital transmitter for data bus communications system
[NASA-CASE-MSC-14558-1] c32 N75-21486

Compact bi-phase pulse coded modulation decoder
[NASA-CASE-MSC-10834-1] c33 N76-14371

Low distortion receiver for bi-level baseband PCM waveforms
[NASA-CASE-MSC-14557-1] c32 N76-16249

Differential pulse code modulation
[NASA-CASE-MSC-12506-1] c32 N77-12239

PULSE COMMUNICATION

Phase shift data transmission system with pseudo-noise synchronization code modulated with digital data into single channel for spacecraft communication
[NASA-CASE-INP-00911] c08 N70-41961

Differential pulse code modulation
[NASA-CASE-MSC-12506-1] c32 N77-12239

PULSE DURATION

Frequency to analog converters with unipolar field effect transistor for determining potential charge by pulse duration of input signal
[NASA-CASE-INP-07040] c08 N71-12500

Electrical testing apparatus for detecting amplitude and width of transient pulse
[NASA-CASE-INP-06519] c09 N71-12519

Design and development of variable pulse width multiplier
[NASA-CASE-XLA-02850] c09 N71-20447

Device for voltage conversion using controlled pulse widths and arrangements to generate ac output voltage
[NASA-CASE-MFS-10068] c10 N71-25139

One shot multivibrator circuit for producing long duration output pulses
[NASA-CASE-ARC-10137-1] c09 N71-28468

Pulse stretcher for narrow pulses
[NASA-CASE-MSC-14130-1] c33 N74-32711

PULSE DURATION MODULATION

Pulse duration modulation multiplier system
[NASA-CASE-IEB-09213] c07 N71-12390

Variable duration pulse integrator design for integrating pulse duration modulated pulses with elimination of ripple content
[NASA-CASE-XLA-01219] c10 N71-23084

Electric motor control system with pulse width modulation for providing automatic null seeking servo
[NASA-CASE-INP-05195] c10 N71-24861

Pulse duration control device for driving slow response time loads in selected sequence including switching and delay circuits and

- magnetic storage
[NASA-CASE-XGS-04224] c10 N71-26418
- Monostable multivibrator for producing output pulse widths with positive feedback NOR gates
[NASA-CASE-MSC-13492-1] c10 N71-28860
- Load current sensor for series pulse width modulated power supply
[NASA-CASE-GSC-10656-1] c09 N72-25249
- PULSE FREQUENCY MODULATION**
Electric current measuring apparatus design including saturable core transformer and energy storage device to avoid magnetizing current errors from transformer output winding
[NASA-CASE-XGS-02439] c14 N71-19431
- Digitally controlled frequency synthesizer for pulse frequency modulation telemetry systems
[NASA-CASE-XGS-02317] c09 N71-23525
- Noninterruptable digital counter circuit design with display device for pulse frequency modulation
[NASA-CASE-XNP-09759] c08 N71-24891
- Threshold extension device for improving operating performance of frequency modulation demodulators by eliminating click-type noise impulses
[NASA-CASE-MSC-12165-1] c07 N71-33696
- PULSE GENERATORS**
High voltage pulse generator for testing flash and ignition limits of nonmetallic materials in controlled atmospheres
[NASA-CASE-MSC-12178-1] c09 N71-13518
- Interrogator and current driver circuit for combination with transistor flip-flop circuit
[NASA-CASE-XGS-03058] c10 N71-19547
- Electric circuit for producing high current pulse having fast rise and fall time
[NASA-CASE-XMS-04919] c09 N71-23270
- Pulse generator for synchronizing or resetting electronic signals without requiring separate external source
[NASA-CASE-XGS-03632] c09 N71-23311
- Development and characteristics of resettable monostable pulse generator with charge rundown-timing circuit
[NASA-CASE-GSC-11139] c09 N71-27016
- Pulse generating circuit for operation at very high duty cycles and repetition rates
[NASA-CASE-XNP-00745] c10 N71-28960
- Pulse coupling circuit with switch between generator and winding
[NASA-CASE-LEW-10433-1] c09 N72-22197
- Method and apparatus for nondestructive testing --- using high frequency arc discharges
[NASA-CASE-MFS-21233-1] c38 N74-15395
- Random pulse generator
[NASA-CASE-MSC-14131-1] c33 N75-19515
- PULSE RATE**
Circuit for measuring wide range of pulse rates by utilizing high capacity counter
[NASA-CASE-XNP-06234] c10 N71-27137
- Peak holding circuit for extremely narrow pulses
[NASA-CASE-MSC-14129-1] c33 N75-18479
- PULSED LASERS**
Repetitively pulsed wavelength selective carbon dioxide laser
[NASA-CASE-EBC-10178] c16 N71-24832
- Dually mode locked Nd:YAG laser
[NASA-CASE-GSC-11746-1] c36 N75-19654
- Two wavelength double pulse tunable dye laser
[NASA-CASE-LAR-12012-1] c36 N77-10517
- Isotope separation using metallic vapor lasers
[NASA-CASE-NFO-13550-1] c36 N77-26477
- PULSED RADIATION**
Development and characteristics of cyclically operable, optical shutter for use as focal plane shutter for transmitting single radiation pulses
[NASA-CASE-NFO-10758] c14 N73-14427
- PULSES**
High resolution radar transmitting system for transmitting optical pulses to targets
[NASA-CASE-NFO-11426] c07 N73-26119
- PUMP SEALS**
Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
[NASA-CASE-XNP-08881] c17 N71-28747
- Spiral groove seal --- for hydraulic rotating shaft
[NASA-CASE-LEW-10326-3] c37 N74-10474
- PUMPS**
Piezoelectric pump for supplying fluid at high frequencies to gyroscope fluid suspension system
[NASA-CASE-XNP-05429] c26 N71-21824
- Vapor-liquid separator design with vapor driven pump for separated liquid pumping for application in propellant transfer
[NASA-CASE-XNP-04042] c15 N71-23023
- Automatically reciprocating, high pressure pump for use in spacecraft cryogenic propellants
[NASA-CASE-XNP-04731] c15 N71-24042
- Development and characteristics of variable displacement fluid pump for transforming hydraulic pressures
[NASA-CASE-MFS-20830] c15 N71-30028
- Pumping and metering dual piston system and monitor for reaction chamber constituents
[NASA-CASE-GSC-10218-1] c15 N72-21465
- Magnetocaloric pump --- for cryogenic fluids
[NASA-CASE-LEW-11672-1] c37 N74-27904
- PUNCHED CARDS**
Describing device for flagging punched business cards
[NASA-CASE-XLA-02705] c08 N71-15908
- Handling tool for printed circuit cards
[NASA-CASE-MFS-20453] c15 N71-29133
- PUNCHES**
Punch and die device for forming convolution series in thin gage metal hemispheres
[NASA-CASE-XNP-05297] c15 N71-23811
- PURGING**
Carbon dioxide purge systems to prevent condensation in spaces between cryogenic fuel tanks and hypersonic vehicle skin
[NASA-CASE-XLA-01967] c31 N70-42015
- Developing high pressure gas purification and filtration system for use in test operations of space vehicles
[NASA-CASE-MFS-12806] c14 N71-17588
- Fluid transferring system design for purging toxic, corrosive, or noxious fluids and fumes from materials handling equipment for cleansing and accident prevention
[NASA-CASE-XMS-01905] c12 N71-21089
- Device for back purging thrust engines
[NASA-CASE-XMS-04826] c28 N71-28849
- PURIFICATION**
Apparatus and method capable of receiving large quantity of high pressure helium, removing impurities, and discharging at received pressure
[NASA-CASE-XNP-06888] c15 N71-24044
- Purification apparatus for vaporization and fractional distillation of liquids
[NASA-CASE-XNP-08124] c15 N71-27184
- Water purification process
[NASA-CASE-ABC-10643-2] c51 N75-13506
- PURITY**
Synthesis of high purity dianilinosilanes
[NASA-CASE-XNP-06409] c06 N71-23230
- PUSH-PULL AMPLIFIERS**
Frequency modulated oscillator
[NASA-CASE-MFS-23181-1] c33 N77-17351
- PYROGEN**
Molded composite pyrogen igniter for rocket motors
[NASA-CASE-LAR-12018-1] c20 N76-29365
- PYROLYSIS**
Pyrolysis system and process --- recovering energy from solid wastes containing hydrocarbons
[NASA-CASE-MSC-12669-1] c44 N76-16621
- PYROLYTIC GRAPHITE**
Multislit film cooled pyrolytic graphite rocket nozzle
[NASA-CASE-XNP-04389] c28 N71-20942
- PYROLYTIC MATERIALS**
Design, development, and characteristics of ablation structures
[NASA-CASE-XMS-01816] c33 N71-15623
- PYROMETERS**
Sensor device with switches for measuring surface recession of charring and noncharring ablators
[NASA-CASE-XLA-01781] c14 N69-39975
- PYROTECHNICS**
Energy source with tantalum capacitors in parallel and miniature silver oxide button cells for initiating pyrotechnic devices on

spacecraft and rocket vehicles
[NASA-CASE-LAR-10367-1] c03 N70-26817
Development and characteristics of squib
actuated explosive disconnect for spacecraft
release from launch vehicle
[NASA-CASE-NFO-11330] c33 N73-26958

Q

Q SWITCHED LASERS

Optically detonated explosive device
[NASA-CASE-NFO-11743-1] c28 N74-27425
Spatial filter for Q-switched lasers
[NASA-CASE-LFW-12164-1] c36 N77-32478

Q VALUES

Design of active RC network capable of operating
at high Q values with reduced sensitivity to
gain amplification and number of passive
components
[NASA-CASE-ARC-10042-2] c10 N72-11256

QUADRATIC PROGRAMMING

Quadrature demodulation
[NASA-CASE-GSC-12137-1] c32 N77-27272

QUADRATURES

Automatic quadrature control and measuring system
--- using optical coupling circuitry
[NASA-CASE-MFS-21660-1] c35 N74-21017

QUALITATIVE ANALYSIS

Ultraviolet chromatographic detector for
quantitative and qualitative analysis of
compounds
[NASA-CASE-HQN-10756-1] c14 N72-25428
Analysis of volatile organic compounds --- trace
amounts of organic volatiles in gas samples
[NASA-CASE-MSC-14428-1] c23 N77-17161

QUANTITATIVE ANALYSIS

Mixed liquid and vapor phase analyzer design
with thermocouples for relative heat transfer
measurement
[NASA-CASE-NFO-10691] c14 N71-26199
Quantitative liquid measurements in container by
resonant frequencies
[NASA-CASE-INE-02500] c18 N71-27397
Ultraviolet chromatographic detector for
quantitative and qualitative analysis of
compounds
[NASA-CASE-HQN-10756-1] c14 N72-25428
Nondispersive gas analysis using radiation
detection for quantitative analysis
[NASA-CASE-ARC-10308-1] c06 N72-31141
Analysis of volatile organic compounds --- trace
amounts of organic volatiles in gas samples
[NASA-CASE-MSC-14428-1] c23 N77-17161

QUANTUM THEORY

III-V photocathode with nitrogen doping for
increased quantum efficiency
[NASA-CASE-NFO-12134-1] c33 N76-31409

QUARTZ

Ultraviolet filter of thorium fluoride and
cryolite on quartz base
[NASA-CASE-IMP-02340] c23 N69-24332
Method for attaching a fused-quartz mirror to a
conductive metal substrate
[NASA-CASE-MFS-23405-1] c26 N77-29260

QUARTZ LAMPS

High intensity heat and light unit containing
quartz lamp elements protectively positioned
to withstand severe environmental stress
[NASA-CASE-XIA-00141] c09 N70-33312
Light shield and cooling apparatus --- high
intensity ultraviolet lamp
[NASA-CASE-LAR-10089-1] c34 N74-23066

R

RACKS (FRAMES)

Design and development of test stand system for
supporting test items in vacuum chamber
[NASA-CASE-MFS-21362] c11 N73-20267
Thrust-isolating mounting --- characteristics of
support for loads mounted in spacecraft
[NASA-CASE-MFS-21680-1] c18 N74-27397

RADAR ANTENNAS

Interferometric tuning acquisition and tracking
radar antenna system
[NASA-CASE-XMS-09610] c07 N71-24625
Variable beamwidth antenna --- with multiple
beam, variable feed system
[NASA-CASE-GSC-11862-1] c32 N76-18295

Highly efficient antenna system using a
corrugated horn and scanning hyperbolic
reflector
[NASA-CASE-NFO-13568-1] c32 N76-21365

RADAR ATTENUATION

FM/CW radar system
[NASA-CASE-MFS-22234-1] c32 N76-33364

RADAR DATA

Charge-coupled device data processor for an
airborne imaging radar system
[NASA-CASE-NFO-13587-1] c32 N77-32342

RADAR ECHOES

Charge-coupled device data processor for an
airborne imaging radar system
[NASA-CASE-NFO-13587-1] c32 N77-32342

RADAR EQUIPMENT

Spacecraft transponder and ground station radar
system for mapping planetary surfaces
[NASA-CASE-NFO-11001] c07 N72-21118
FM/CW radar system
[NASA-CASE-MFS-22234-1] c32 N76-33364

RADAR IMAGERY

Method of locating persons in distress --- by
using radar imagery from radar reflectors
[NASA-CASE-LAR-11390-1] c32 N77-21267

RADAR RANGE

Radar signal receiver arrangement for extending
range and increasing signal to noise ratio
[NASA-CASE-IMP-00748] c07 N70-36911

RADAR RECEIVERS

Polarization diversity monopulse tracking
receiver design without radio frequency switches
[NASA-CASE-IGS-03501] c09 N71-20864

RADAR RECEPTION

Radar signal receiver arrangement for extending
range and increasing signal to noise ratio
[NASA-CASE-IMP-00748] c07 N70-36911

RADAR REFLECTORS

Inflatable radar reflector unit - lightweight,
highly reflective to electromagnetic
radiation, and adaptable for erection and
deployment with minimum effort and time
[NASA-CASE-XMS-00893] c07 N70-40063
Method of locating persons in distress --- by
using radar imagery from radar reflectors
[NASA-CASE-LAR-11390-1] c32 N77-21267

RADAR TRACKING

Tracking antenna system with array for
synchronous satellite or ground based radar
[NASA-CASE-GSC-10553-1] c07 N71-19854
Polarization diversity monopulse tracking
receiver design without radio frequency switches
[NASA-CASE-IGS-03501] c09 N71-20864
Monopulse tracking system with antenna array of
three radiators for deriving azimuth and
elevation indications
[NASA-CASE-IGS-01155] c10 N71-21483
Plastic sphere for radar tracking and calibration
[NASA-CASE-XLA-11154] c07 N72-21117

RADAR TRANSMITTERS

High resolution radar transmitting system for
transmitting optical pulses to targets
[NASA-CASE-NFO-11426] c07 N73-26119

RADIAL FLOW

Radial heat flux transformer for use in heating
and cooling processes
[NASA-CASE-NFO-10828] c33 N72-17948
Axially and radially controllable magnetic bearing
[NASA-CASE-GSC-11551-1] c37 N76-18459

RADIANCE

Method and apparatus for measuring shock layer
radiation distribution about high velocity
objects
[NASA-CASE-XAC-02970] c14 N69-39896

RADIANT COOLING

Direct radiation cooling of linear beam
collector tubes
[NASA-CASE-IMP-09227] c15 N69-24319
High thermal emittance black surface coatings
and process for applying to metal and metal
alloy surfaces used in radiative cooling of
spacecraft
[NASA-CASE-XLA-06199] c15 N71-24875
Method for attaching a fused-quartz mirror to a
conductive metal substrate
[NASA-CASE-MFS-23405-1] c26 N77-29260

RADIANT FLUX DENSITY

High intensity radiant energy pulse source for
calibrating heat transfer gages with

- thermoluminescent shutter activation
[NASA-CASE-ARC-10178-1] c09 N72-17152
- RADIANT HEATING**
High intensity heat and light unit containing quartz lamp elements protectively positioned to withstand severe environmental stress
[NASA-CASE-XLA-00141] c09 N70-33312
High temperature source of thermal radiation
[NASA-CASE-XLE-00490] c33 N70-34545
Refractory filament series circuitry for radiant heater
[NASA-CASE-XLE-00387] c33 N70-34812
Unfired ceramic insulation for protection from radiant heating environments
[NASA-CASE-NFS-14253] c33 N71-24858
- RADIATION**
Development of radiant energy sensor to detect the radiant energy wavelength bands from portions of radiating body
[NASA-CASE-ARC-10174] c14 N72-25409
Development of thermopile with sensor surface to receive radiant energy and to provide measurement of energy quantity
[NASA-CASE-NFO-11493] c14 N73-12447
Two-dimensional radiant energy array computers and computing devices
[NASA-CASE-GSC-11839-2] c60 N76-18803
Analog to digital converter for two-dimensional radiant energy array computers
[NASA-CASE-GSC-11839-3] c60 N77-32731
- RADIATION ABSORPTION**
NDIR gas analyzer based on absorption modulation ratios for known and unknown samples
[NASA-CASE-ARC-10802-1] c35 N75-30502
Differential optoacoustic absorption detector
[NASA-CASE-NFO-13759-1] c35 N77-11363
- RADIATION COUNTERS**
Particle detector for indicating incidence and energy of minute space particles
[NASA-CASE-XLA-00135] c14 N70-33322
Sensing method and device for determining orientation of space vehicle or satellite by using particle traps
[NASA-CASE-XGS-00466] c21 N70-34297
Solid state device for mapping flux and power in nuclear reactor cores
[NASA-CASE-XLE-00301] c14 N70-36808
Particle beam power density detection and measurement apparatus
[NASA-CASE-XLE-00243] c14 N70-38602
Automatic baseline stabilization for ionization detector used in gas chromatograph
[NASA-CASE-XNF-03128] c10 N70-41991
Method of forming thin window drifted silicon charged particle detector
[NASA-CASE-XLE-00808] c24 N71-10560
Development of dosimeter for measuring absorbed dose of high energy ionizing radiation
[NASA-CASE-XLA-03645] c14 N71-20430
Apparatus for detecting particle emission lower than noise level of multiplier tube
[NASA-CASE-XLA-07813] c14 N72-17328
Radiation or charged particle detector and amplifier
[NASA-CASE-NFO-12128-1] c14 N73-32317
Coaxial anode wire for gas radiation counters
[NASA-CASE-GSC-11492-1] c35 N74-26949
- RADIATION DAMAGE**
Addition of group 3 elements to silicon semiconductor material for increased resistance to radiation damage in solar cells
[NASA-CASE-XLE-02798] c26 N71-23654
Recovering efficiency of solar cells damaged by environmental radiation through thermal annealing
[NASA-CASE-XGS-04047-2] c03 N72-11062
Photomultiplier circuit including means for rapidly reducing the sensitivity thereof --- and protection from radiation damage
[NASA-CASE-ARC-10593-1] c33 N74-27682
- RADIATION DETECTORS**
Radiation source and detection system for measuring amount of liquid inside tanks independently of liquid configuration
[NASA-CASE-RSC-12280] c27 N71-16348
Detection instrument for light emitted from ATP biochemical reaction
[NASA-CASE-XGS-05534] c23 N71-16355
- Circuit design for determining amount of photomultiplier tube light detection utilizing variable current source and dark current signals of opposite polarity
[NASA-CASE-XMS-03478] c14 N71-21040
Attitude sensor with scanning mirrors for detecting orientation of space vehicle with respect to planet
[NASA-CASE-XLA-00793] c21 N71-22880
Mosaic semiconductor radiation detector and position indicator systems engineering for low energy particles
[NASA-CASE-XGS-03230] c14 N71-23401
Nondispersive gas analysis using radiation detection for quantitative analysis
[NASA-CASE-ARC-10308-1] c06 N72-31141
Radiation source tracker comprised of sectorized matrix of detectors with output voltages corresponding to irradiance levels
[NASA-CASE-NFO-11686] c14 N73-25462
Radiation or charged particle detector and amplifier
[NASA-CASE-NFO-12128-1] c14 N73-32317
Mossbauer spectrometer radiation detector
[NASA-CASE-LAR-11155-1] c35 N74-15091
High field CdS detector for infrared radiation
[NASA-CASE-LAR-11027-1] c35 N74-18088
Flame detector operable in presence of proton radiation
[NASA-CASE-NFS-21577-1] c19 N74-29410
Wide angle sun sensor --- consisting of cylinder, insulation and pair of detectors
[NASA-CASE-NFO-13327-1] c35 N75-23910
Detector absorptivity measuring method and apparatus
[NASA-CASE-LAE-10907-1] c35 N76-29551
- RADIATION DISTRIBUTION**
Space simulator with uniform test region radiation distribution, adapted to simulate Venus solar radiations
[NASA-CASE-XNP-00459] c11 N70-38675
- RADIATION DOSAGE**
Development of dosimeter for measuring absorbed dose of high energy ionizing radiation
[NASA-CASE-XLA-03645] c14 N71-20430
- RADIATION EFFECTS**
Method for temperature compensating semiconductor gages by exposure to high energy radiation
[NASA-CASE-XLA-04555-1] c14 N71-25892
- RADIATION HARDENING**
Radiation hardening of MOS devices by boron --- for stabilizing gate threshold potential of field effect device
[NASA-CASE-GSC-11425-1] c76 N74-20329
- RADIATION MEASUREMENT**
Development of thermopile with sensor surface to receive radiant energy and to provide measurement of energy quantity
[NASA-CASE-NFO-11493] c14 N73-12447
- RADIATION MEASURING INSTRUMENTS**
Rocket-borne aspect sensor consisting of radiation sensor, apertured disk, computer, and counting circuits
[NASA-CASE-XGS-08266] c14 N69-27432
Infrared scanning system for maintaining spacecraft orientation with earth reference
[NASA-CASE-XLA-00120] c21 N70-33181
Multiple wavelength radiation measuring instrument for determining hot body or gas temperature
[NASA-CASE-XLE-00011] c14 N70-41946
Development of method for improving signal to noise ratio and accuracy of Wheatstone bridge type radiation measuring instrument
[NASA-CASE-XLA-02810] c14 N71-25901
Development of thermopile with sensor surface to receive radiant energy and to provide measurement of energy quantity
[NASA-CASE-NFO-11493] c14 N73-12447
Phototransistor with base collector junction diode for integration into photo sensor arrays
[NASA-CASE-NFS-20407] c09 N73-19235
Method and apparatus for measuring electromagnetic radiation
[NASA-CASE-LFW-11159-1] c14 N73-28488
Design of gamma ray spectrometer for measurement of intense radiation using Compton scattering effect

[NASA-CASE-MFS-21441-1] c14 N73-30392
Coaxial anode wire for gas radiation counters
[NASA-CASE-GSC-11492-1] c35 N74-26949

RADIATION MEDICINE
Method of producing I-123 --- by bombardment of cesium causing spallation
[NASA-CASE-LEW-11390-2] c25 N76-27383

RADIATION PROTECTION
Development of method for protecting large and oddly shaped areas from radiant and convective heat
[NASA-CASE-IMP-01310] c33 N71-28852
Cooling and radiation protection of ruby lasers using copper sulfate solution in alcohol
[NASA-CASE-MFS-20180] c16 N72-12440
Photomultiplier circuit including means for rapidly reducing the sensitivity thereof --- and protection from radiation damage
[NASA-CASE-ARC-10593-1] c33 N74-27682

RADIATION SHIELDING
Encapsulated heater forming hollow body for cathode used in ion thruster
[NASA-CASE-LEW-10814-1] c28 N70-35422
Describing hot filament type Bayard-Alpert ionization gage with ion collector buried or removed from grid structure
[NASA-CASE-XLA-07424] c14 N71-18482
Sealed housing for protecting electronic equipment against electromagnetic interference
[NASA-CASE-MSC-12168-1] c09 N71-18600
Internal labyrinth and shield structure to improve electrical isolation of propellant feed source from ion thruster
[NASA-CASE-LEW-10210-1] c28 N71-26781
Light shield and cooling apparatus --- high intensity ultraviolet lamp
[NASA-CASE-LAR-10089-1] c34 N74-23066

RADIATION SOURCES
Sight switch using infrared source and sensor mounted beside eye
[NASA-CASE-IMP-03934] c09 N71-22985
Apparatus for obtaining isotropic irradiation on film emulsion from parallel radiation source
[NASA-CASE-MFS-20095] c24 N72-11595
Radiation source tracker comprised of sectorized matrix of detectors with output voltages corresponding to irradiance levels
[NASA-CASE-NFO-11686] c14 N73-25462
High powered arc electrodes --- producing solar simulator radiation
[NASA-CASE-LEW-11162-1] c33 N74-12913
Electric arc light source having undercut recessed anode
[NASA-CASE-ARC-10266-1] c33 N75-29318
Apparatus and method for determining the position of a radiant energy source
[NASA-CASE-GSC-12147-1] c35 N77-20410

RADIATION SPECTRA
Maksutov spectrograph for low light level research
[NASA-CASE-XLA-10402] c14 N71-29041

RADIATION THERAPY
A cervix-to-rectum measuring device in a radiation applicator for use in the treatment of cervical cancer
[NASA-CASE-GSC-12081-2] c52 N77-26796

RADIATION TOLERANCE
Ultraviolet radiation resistant alkali-metal silicate coatings for temperature control of spacecraft
[NASA-CASE-XGS-04119] c18 N69-39979
Doping silicon material with gadolinium to increase radiation resistance of solar cells
[NASA-CASE-XIE-02792] c26 N71-10607
Improving radiation resistance of silicon semiconductor junctions by doping with lithium
[NASA-CASE-XGS-07801] c09 N71-12513
Radiation hardening of MOS devices by boron --- for stabilizing gate threshold potential
[NASA-CASE-GSC-11425-2] c76 N75-25730

RADIATIVE HEAT TRANSFER
Heat flux sensor assembly with proviso for heat shield to reduce radiative transfer between sensor elements
[NASA-CASE-XMS-05909-1] c14 N69-27459
Capillary radiator for carrying heat transfer liquid in planetary spacecraft structures
[NASA-CASE-XIE-03307] c33 N71-14035
Transient heat transfer gage for measuring total radiant intensity from far ultraviolet and

ionized high temperature gases
[NASA-CASE-IMP-09802] c33 N71-1564
Construction and method of arranging plurality of ion engines to form cluster thereby increasing efficiency and control by decreasing heat radiated to space
[NASA-CASE-IMP-02923] c28 N71-23081

RADIATORS
Development and characteristics of natural circulation radiator for use with nuclear power plants installed in lunar space stations
[NASA-CASE-XHC-03673] c33 N71-29046

RADIO ANTENNAS
Low loss parasitic probe antenna for prelaunch tests of spacecraft antennas
[NASA-CASE-IKS-09348] c09 N71-13521
VHF/UHF parasitic probe antenna for spacecraft communication
[NASA-CASE-IKS-09340] c07 N71-24614
Development and characteristics of extensible dipole antenna using deformable tubular metallic strip element
[NASA-CASE-HCN-00937] c07 N71-28979
Highly efficient antenna system using a corrugated horn and scanning hyperbolic reflector
[NASA-CASE-NFC-13568-1] c32 N76-21365

RADIO ASTRONOMY
Synchronous detection system for detecting weak radio astronomical signals
[NASA-CASE-IMP-09832] c30 N71-23723

RADIO COMMUNICATION
A system for synchronizing synthesizers of communication systems
[NASA-CASE-GSC-12148-1] c32 N77-22314

RADIO CONTROL
Radio frequency controlled solid state switch
[NASA-CASE-ARC-10136-1] c09 N72-22202

RADIO EQUIPMENT
A system for synchronizing synthesizers of communication systems
[NASA-CASE-GSC-12148-1] c32 N77-22314

RADIO FREQUENCIES
Helical coaxial resonator RF filter
[NASA-CASE-IGS-02816] c07 N69-24323
Automatic gain control amplifier system
[NASA-CASE-IMS-05307] c09 N69-24330
Method and apparatus for bowing of instrument panels to improve radio frequency shielded enclosure
[NASA-CASE-IMP-09422] c07 N71-19436
Development of automatic frequency discriminators and control for phase lock loop providing frequency preset capabilities
[NASA-CASE-IMP-08665] c10 N71-19467
System generating sidereal frequency signals from signals of standard solar frequency without use of mixing operations or feedback loops
[NASA-CASE-IGS-02610] c14 N71-23174
Radio frequency coaxial filter to provide dc isolation and low frequency signal rejection in audio range
[NASA-CASE-IGS-01418] c09 N71-23573
Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide frequency range and minimizing noise effects
[NASA-CASE-IMP-09830] c14 N71-26266
High efficiency transformerless amplitude modulator coupled to RF power amplifier
[NASA-CASE-GSC-10668-1] c07 N71-28430
Technique and equipment for sputtering using apertured electrode and pulsed substrate bias
[NASA-CASE-LEW-10920-1] c17 N73-24569
Radio frequency source resistance measuring instruments of varied design
[NASA-CASE-NFO-11291-1] c14 N73-30388
Multichannel logarithmic RF level detector
[NASA-CASE-LAR-11021-1] c32 N76-14341
Ion and electron detector for use in an ICR spectrometer
[NASA-CASE-NFO-13479-1] c35 N77-10492

RADIO FREQUENCY DISCHARGE
Process for preparing higher oxides of the alkali and alkaline earth metals --- using radio frequency discharge sustained in oxygen
[NASA-CASE-ARC-10992-1] c25 N77-17178

RADIO FREQUENCY INTERFERENCE
Radio frequency noise generator having microwave

- slow-wave structure in gas discharge plasma
[NASA-CASE-XFR-11019] c09 N71-23598
- System for interference signal nulling by
polarization adjustment
[NASA-CASE-NFO-13140-1] c32 N75-24982
- Systems and methods for determining radio
frequency interference
[NASA-CASE-GSC-12150-1] c32 N77-12247
- Apparatus and method for determining the
position of a radiant energy source
[NASA-CASE-GSC-12147-1] c35 N77-20410
- RADIO FREQUENCY SHIELDING**
Gunn effect microwave diodes with RF shielding
[NASA-CASE-ERC-10119] c26 N72-21701
- Process for making RF shielded cable connector
assemblies and resulting structures
[NASA-CASE-GSC-11215-1] c09 N73-28083
- RADIO RECEIVERS**
Radio receiver with array of independently
steerable antennas for deep space communication
[NASA-CASE-XLA-00901] c07 N71-10775
- Development of optimum pre-detection diversity
combining receiving system adapted for use
with amplitude modulation, phase modulation,
and frequency modulation systems
[NASA-CASE-XGS-00740] c07 N71-23098
- Very narrow band width receiver
[NASA-CASE-GSC-12142-1] c32 N77-20299
- RADIO RELAY SYSTEMS**
Satellite radio communication system with remote
steerable antenna
[NASA-CASE-XNP-02389] c07 N71-28900
- Systems and methods for determining radio
frequency interference
[NASA-CASE-GSC-12150-1] c32 N77-12247
- RADIO SIGNALS**
Erectable, inflatable, radio signal reflecting
passive communication satellite
[NASA-CASE-XLA-00210] c30 N70-40309
- Synchronous detection system for detecting weak
radio astronomical signals
[NASA-CASE-XNP-09832] c30 N71-23723
- RADIO SOURCES (ASTRONOMY)**
Conical scan tracking system employing a large
antenna --- for tracking spacecraft or radio
sources
[NASA-CASE-NFO-14009-1] c32 N77-28357
- RADIO STARS**
System generating sidereal frequency signals
from signals of standard solar frequency
without use of mixing operations or feedback
loops
[NASA-CASE-XGS-02610] c14 N71-23174
- RADIO TELEMETRY**
Digital telemetry system apparatus to reduce
tape recorder wcv and flutter noise during
playback
[NASA-CASE-XGS-01812] c07 N71-23001
- RADIO TRANSMITTERS**
Vehicle locating system utilizing AM
broadcasting station carriers
[NASA-CASE-NFO-13217-1] c32 N75-26194
- Aircraft-mounted crash-activated transmitter
device
[NASA-CASE-MFS-16609-3] c03 N76-32140
- RADIO WAVES**
Gunn effect microwave diodes with RF shielding
[NASA-CASE-ERC-10119] c26 N72-21701
- RADIOACTIVE ISOTOPES**
Thermally cascaded thermoelectric generator with
radioisotopic heat source
[NASA-CASE-NFO-10753] c03 N72-26031
- Protected isotope heat source --- for
atmospheric reentry protection and heat
transmission to spacecraft
[NASA-CASE-LEW-11227-1] c73 N75-30876
- RADIOBIOLOGY**
Production of I-123 for use as
radiopharmaceutical for low radiation exposure
[NASA-CASE-LEW-10516-1] c24 N72-33681
- RADIOGRAPHY**
Nondestructive radiographic tests of resistance
welds
[NASA-CASE-XNP-02588] c15 N71-18613
- Method and system for in vivo measurement of
bone tissue using a two level energy source
[NASA-CASE-MSC-14276-1] c52 N77-14737
- RADIOLYSIS**
Process for making anhydrous metal halides
[NASA-CASE-LEW-11860-1] c37 N76-18458
- RADIOMETERS**
Miniaturized radiometer for detecting low level
thermal radiation
[NASA-CASE-XLA-04556] c14 N69-27484
- Black body radiometer design with temperature
sensing and cavity heat source cone winding
[NASA-CASE-XNP-09701] c14 N71-26475
- Black body radiometer having isothermally
surrounded cavity for ultraviolet, visible,
and infrared radiation
[NASA-CASE-NFO-10810] c14 N71-27323
- Thermoelectric radiometer using polymer film
as capacitor
[NASA-CASE-ARC-10138-1] c14 N72-24477
- Development of radiant energy sensor to detect
the radiant energy wavelength bands from
portions of radiating body
[NASA-CASE-ERC-10174] c14 N72-25409
- Development of radiometric sensor to warn
aircraft pilots of region of clear air
turbulence along flight path
[NASA-CASE-ERC-10081] c14 N72-28437
- Radiometric measuring system for solar activity
and atmospheric attenuation and emission
[NASA-CASE-ERC-10276] c14 N73-26432
- Steady state thermal radiometers
[NASA-CASE-MFS-21108-1] c34 N74-27861
- RADIOSONDES**
Induction powered biological radiosonde --- for
measuring intracranial pressure
[NASA-CASE-ARC-11120-1] c52 N77-23743
- RAIN**
Precipitation detector and mechanism for
stopping and restarting machinery at
initiation and cessation of rain
[NASA-CASE-XLA-02619] c10 N71-26334
- RAMJET ENGINES**
Telescoping-spike supersonic nozzle for turbojet
or ramjet engines
[NASA-CASE-XIE-00005] c28 N70-39899
- RAMPS (STRUCTURES)**
Automated multi-level vehicle parking system
[NASA-CASE-NFO-13058-1] c37 N77-22480
- RANDOM LOADS**
Fatigue testing device applying random discrete
load levels to test specimen and applicable to
aircraft structures
[NASA-CASE-XLA-02131] c32 N70-42003
- RANDOM NOISE**
Circuits for amplitude limiting of random noise
inputs
[NASA-CASE-NFO-10169] c10 N71-24844
- Digital servo control of random sound test
excitation --- in reverberant acoustic chamber
[NASA-CASE-NFO-11623-1] c71 N74-31148
- Random pulse generator
[NASA-CASE-MSC-14131-1] c33 N75-19515
- Pseudo noise code and data transmission method
and apparatus
[NASA-CASE-GSC-12017-1] c32 N77-30308
- RANGE (EXTREMES)**
Logarithmic circuit with wide dynamic range
[NASA-CASE-GSC-12145-1] c33 N77-19319
- RANGE FINDERS**
Closed loop radio communication ranging system
to determine distance between moving airborne
vehicle and fixed ground station
[NASA-CASE-XNP-01501] c21 N70-41930
- Digital demodulator-correlator --- for
ranging
[NASA-CASE-NFO-13982-1] c32 N77-24341
- RANGEFINDING**
Equipment for testing of ground station ranging
equipment and spacecraft transponders
[NASA-CASE-XMS-05454-1] c07 N71-12391
- Spacecraft ranging system
[NASA-CASE-NFO-10066] c09 N71-18598
- Binary coded sequential acquisition ranging
system for distance measurements
[NASA-CASE-NFO-11194] c08 N72-25209
- Loop transponder for regenerating code of
bu-type ranging system
[NASA-CASE-NFO-11707] c07 N73-25161
- Orbital and entry tracking accessory for glides
--- to provide range requirements for reentry
vehicles to any landing site
[NASA-CASE-LAR-10626-1] c19 N74-21015

RARE EARTH COMPOUNDS

Including didymium hydrate in nickel hydroxide of positive electrode of storage batteries to increase ampere hour capacity
[NASA-CASE-XGS-03505] c03 N71-10608

RARE GASES

Inert gas metallic vapor laser
[NASA-CASE-NFC-13449-1] c36 N75-32441
Hydrogen-fueled engine
[NASA-CASE-NFO-13763-1] c37 N77-11398

RAREFIED GAS DYNAMICS

Preparation of dielectric coatings of variable dielectric constant by plasma polymerization
[NASA-CASE-ARC-10892-2] c27 N77-17245

RAREFIED GASES

Magnetically controlled plasma accelerator capable of ignition in low density gaseous environment
[NASA-CASE-XLA-00327] c25 N71-29184

RATES (PER TIME)

Apparatus and digital technique for coding rate data
[NASA-CASE-LAR-10128-1] c08 N73-20217

RC CIRCUITS

RC transistor circuit to indicate each pulse of pulse train and occurrence of nth pulse
[NASA-CASE-XNF-00906] c09 N70-41655

Device utilizing RC rate generators for continuous slow speed measurement
[NASA-CASE-XNF-02966] c10 N71-24863

Digital data handling circuits for pulse amplifiers
[NASA-CASE-XNP-01068] c10 N71-28739

Design of active RC network capable of operating at high Q values with reduced sensitivity to gain amplification and number of passive components
[NASA-CASE-ARC-10042-2] c10 N72-11256

Active RC filter networks and amplifiers for deep space magnetic field measurement
[NASA-CASE-XAC-05462-2] c10 N72-17171

RC networks with voltage amplifier, RC input circuit, and positive feedback
[NASA-CASE-ARC-10020] c10 N72-17172

Multiloop RC active filter network with low parameter sensitivity and low amplifier gain
[NASA-CASE-ARC-10192] c09 N72-21245

Temperature control system comprised of wheatstone bridge with RC circuit
[NASA-CASE-NFO-11304] c14 N73-26430

Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-3] c33 N75-19520

REACTION CONTROL

Development of voice operated controller for controlling reaction jets of spacecraft
[NASA-CASE-XLA-04063] c31 N71-33160

REACTION WHEELS

Satellite stabilization reaction wheel scanner
[NASA-CASE-XGS-02629] c14 N71-21082

Gravity gradient attitude control system with gravity gradiometer and reaction wheels for artificial satellite attitude control
[NASA-CASE-GSC-10555-1] c21 N71-27324

REACTIVITY

Absorbing gas reactivity control system for minimizing power distribution and perturbation in nuclear reactors
[NASA-CASE-XLE-04599] c22 N72-20597

REACTOR CORES

Simulated fuel assembly-type flow measurement apparatus for coolant flow in reactor core
[NASA-CASE-XLE-00724] c14 N70-34669

Solid state device for mapping flux and power in nuclear reactor cores
[NASA-CASE-XLE-00304] c14 N70-36808

Reactor heated in-core diodes for energy conversion
[NASA-CASE-NFO-10542] c09 N72-27228

REACTOR DESIGN

Nonequilibrium radiation nuclear reactor
[NASA-CASE-BQN-10841-1] c73 N75-22108

REACTOR MATERIALS

Zirconium modified nickel-copper alloy
[NASA-CASE-LEW-12245-1] c26 N77-20201

REACTOR TECHNOLOGY

Nuclear reactor control rod assembly with improved driving mechanism
[NASA-CASE-XLE-00298] c22 N70-34501

READOUT

Flow angle sensor and remote readout system for use with cryogenic fluids
[NASA-CASE-XLE-04503] c14 N71-24864

System for checking status of several double-throw switches by readout indications
[NASA-CASE-XLA-08799] c10 N71-27272

REAL TIME OPERATION

Respiratory analysis system to determine gas flow rate and frequency of respiration and expiration cycles in real time
[NASA-CASE-MSC-13436-1] c05 N73-32015

Real time moving scene holographic camera system
[NASA-CASE-MFS-21087-1] c35 N74-17153

Real time liquid crystal image converter
[NASA-CASE-LAR-11206-1] c74 N74-30118

Real time, large volume, moving scene holographic camera system
[NASA-CASE-MFS-22537-1] c35 N75-27328

Carbon monoxide monitor --- using real time operation
[NASA-CASE-MFS-22060-1] c35 N75-29380

Real time analysis of voiced sounds
[NASA-CASE-NFO-13465-1] c32 N76-31372

Contour detector and data acquisition system for the left ventricular outline
[NASA-CASE-ARC-10985-1] c52 N77-17701

Real time reflectometer --- measurement of specular reflectance
[NASA-CASE-MFS-23118-1] c35 N77-31465

RECEIVERS

Semiconductor in resonant cavity for improving signal to noise ratio of communication receiver
[NASA-CASE-MSC-12259-1] c07 N70-12616

Improved phase lock loop for receiver in multichannel telemetry system with suppressed carrier
[NASA-CASE-NFO-11593-1] c07 N73-28012

Automatic carrier acquisition system for phase locked loop receiver
[NASA-CASE-NFO-11628-1] c07 N73-30113

Coherent receiver employing nonlinear coherence detection for carrier tracking
[NASA-CASE-NFO-11921-1] c32 N74-30523

Low distortion receiver for bi-level baseband PCM waveforms
[NASA-CASE-MSC-14557-1] c32 N76-16249

Receiving and tracking phase modulated signals
[NASA-CASE-MSC-16170-1] c32 N77-12248

Wideband heterodyne receiver for laser communication system
[NASA-CASE-GSC-12053-1] c32 N77-28346

RECONSTRUCTION

Method and means for recording and reconstructing holograms without use of reference beam
[NASA-CASE-FRC-10020] c16 N71-26154

RECORDING HEADS

Magnetic tape head function switching system
[NASA-CASE-GSC-11956-1] c35 N75-25134

Electromagnetic transducer recording head having a laminated core section and tapered gap
[NASA-CASE-NFO-10711-1] c35 N77-21392

RECORDING INSTRUMENTS

Weighing and recording device for obtaining precise automatic record of small changes in force
[NASA-CASE-XLA-02605] c14 N71-10773

Blood pressure measuring system for separately recording dc and ac pressure signals of Korotkoff sounds
[NASA-CASE-XMS-06061] c05 N71-23317

Helical recorder for multiple channel recording
[NASA-CASE-GSC-10614-1] c09 N72-11224

Thermomagnetic recording and magneto-optic playback system having constant intensity laser beam control
[NASA-CASE-NFO-11317-2] c36 N74-13205

Holography utilizing surface plasmon resonances
[NASA-CASE-MFS-22040-1] c35 N74-26946

Measuring probe position recorder
[NASA-CASE-LAR-10806-1] c35 N74-32877

Apparatus and method for determining the position of a radiant energy source
[NASA-CASE-GSC-12147-1] c35 N77-20410

RECOVERABILITY

Ejectable underwater sound source recovery assembly
[NASA-CASE-LAR-10595-1] c35 N74-16135

RECOVERABLE LAUNCH VEHICLES

Techniques for recovery of multistage rocket vehicles by providing lifting surfaces on individual sections

[NASA-CASE-IXF-00389] c31 N70-34176

RECOVERABLE SPACECRAFT

Describing assembly for opening stabilizing and decelerating flaps of flight capsules used in space research

[NASA-CASE-IXF-03169] c31 N71-15675

RECOVERY PARACHUTES

Parachute system for lowering manned spacecraft from post-reentry to ocean landing

[NASA-CASE-XLA-00195] c02 N70-38009

Development and operating principles of gas generator for deploying recovery parachutes from space capsules during atmospheric entry

[NASA-CASE-LAR-10549-1] c31 N73-13898

RECTANGULAR PANELS

Rectangular solar cell stacked panels to generate electrical power aboard spacecraft

[NASA-CASE-WFO-11771] c03 N73-20040

RECTIFIERS

Lithium drifted silicon radiation detector with gold rectifying contacts

[NASA-CASE-XLE-10529] c14 N69-23191

Power control switching circuit using low voltage semiconductor controlled rectifiers for high voltage isolation

[NASA-CASE-IXF-02713] c10 N69-39888

Precision full wave rectifier circuit for rectifying incoming electrical signals having positive or negative polarity with only positive output signals

[NASA-CASE-ARC-10101-1] c09 N71-33109

Voltage amplitude-responsive trigger circuit with silicon controlled rectifier

[NASA-CASE-GSC-10221-1] c09 N72-23171

Dc to ac to dc converter with transistor driven synchronous rectifiers

[NASA-CASE-GSC-11126-1] c09 N72-25253

REDUCED GRAVITY

Reduced gravity liquid configuration simulator to study propellant behavior in rocket fuel tanks

[NASA-CASE-XIE-02624] c12 N69-39988

Apparatus for measuring human body mass in zero or reduced gravity environment

[NASA-CASE-XNS-03371] c05 N70-42000

Cable suspension and inclined walkway system for simulating reduced or zero gravity environments

[NASA-CASE-XLA-01787] c11 N71-16028

Development of restraint system for securing personnel to ergometer while exercising under weightless conditions

[NASA-CASE-MFS-21046-1] c14 N73-27377

REDUCTION (CHEMISTRY)

Producing metal powders of controlled particle size by reducing oxide using reactive metal vapor in vacuum

[NASA-CASE-XLE-06461] c17 N72-22530

Process for making anhydrous metal halides

[NASA-CASE-LEW-11860-1] c37 N76-18458

REDUNDANT COMPONENTS

Redundant memory for enhanced reliability of digital data processing system

[NASA-CASE-GSC-10564] c10 N71-29135

REELS

Tetherline system for orbiting satellites

[NASA-CASE-MFS-23564-1] c13 N77-11079

Method and apparatus for measuring web material wound on a reel

[NASA-CASE-GSC-11902-1] c38 N77-17495

REENTRY COMMUNICATION

Electrostatic modulator for communicating through plasma sheath formed around spacecraft during reentry

[NASA-CASE-XLA-01400] c07 N70-41331

Method and apparatus for communicating through ionized layer of gases surrounding spacecraft during reentry into planetary atmospheres

[NASA-CASE-XIA-01127] c17 N70-41372

Reentry communication by injection of water droplets into plasma layer surrounding space vehicle

[NASA-CASE-XLA-01552] c07 N71-11284

REENTRY SHIELDING

Transpirationally cooled heat ablation system for interplanetary spacecraft reentry shielding

[NASA-CASE-XNS-02677] c31 N70-42075

Method and apparatus for fabrication of heat insulating and ablative reentry structure

[NASA-CASE-XNS-02009] c33 N71-20834

Ablative heat shield for protection from aerodynamic heating of reentry spacecraft

[NASA-CASE-MSC-12143-1] c33 N72-17947

Protected isotope heat source --- for atmospheric reentry protection and heat transmission to spacecraft

[NASA-CASE-LEW-11227-1] c73 N75-30876

REENTRY TRAJECTORIES

Aerodynamic configuration of reentry vehicle heat shield to provide longitudinal and directional stability at hypersonic velocities

[NASA-CASE-XNS-04142] c31 N70-41631

REENTRY VEHICLES

Leading edge design for hypersonic reentry vehicles

[NASA-CASE-XLA-00165] c31 N70-33242

Delta winged, manned reentry vehicle capable of horizontal glide landing at low speeds

[NASA-CASE-XLA-00241] c31 N70-37986

Telespectrograph for analyzing upper atmosphere by tracking bodies reentering atmosphere at high velocities

[NASA-CASE-XLA-03273] c14 N71-18699

Ablation sensor for measuring surface ablation rate of material on vehicles entering earths atmosphere on entry into planetary atmospheres

[NASA-CASE-XLA-01791] c14 N71-22991

Design of ring wing vehicle of high drag-to-weight ratio to withstand reentry stress into low density atmosphere

[NASA-CASE-XIA-04901] c31 N71-24315

Development of auxiliary lifting system to provide ferry capability for entry vehicles

[NASA-CASE-LAR-10574-1] c11 N73-13257

Development and operating principles of gas generator for deploying recovery parachutes from space capsules during atmospheric entry

[NASA-CASE-LAR-10549-1] c31 N73-13898

Three-component ceramic coating for silica insulation

[NASA-CASE-MSC-14270-2] c27 N76-23426

REFERENCE SYSTEMS

Automatic frequency control device for providing frequency reference for voltage controlled oscillator

[NASA-CASE-KSC-10393] c09 N72-21247

Magnetic heading reference

[NASA-CASE-LAR-11387-2] c04 N77-19056

REFINING

Helium refining by superfluidity

[NASA-CASE-IXF-00733] c06 N70-34946

REFLECTANCE

Optical characteristics measuring apparatus

[NASA-CASE-IXF-08840] c23 N71-16365

Device for determining acceleration of gravity by interferometric measurement of travel of falling body

[NASA-CASE-IXF-05844] c14 N71-17587

Highly stable optical mirror assembly optimizing image quality of light diffraction patterns

[NASA-CASE-ERC-10001] c23 N71-24868

Transmitting and reflecting diffuser

[NASA-CASE-LAR-10385-3] c23 N73-32538

REFLECTED WAVES

Device and method for determining X ray reflection efficiency, scattering properties, and surface finish of optical surfaces

[NASA-CASE-MFS-20243] c43 N73-13662

Clear air turbulence detector

[NASA-CASE-MFS-21244-1] c36 N75-15028

Reflected-wave maser --- low noise amplifier

[NASA-CASE-WFO-13490-1] c36 N76-31512

REFLECTING TELESCOPES

Three-mirror telescope

[NASA-CASE-MFS-23675-1] c74 N77-28937

REFLECTION

Vacuum preparation of zinc titanate pigment resistant to loss of reflective properties

[NASA-CASE-MFS-13532] c18 N72-17532

Solar cell surface treatment

[NASA-CASE-LEW-11330-1] c44 N76-14612

Method and apparatus for compensating reflection losses in a path length modulated absorption-absorption trace gas detector --- for determining density of gas

- [NASA-CASE-ABC-10631-1] c74 N76-20958
- REFLECTOMETERS**
- Ellipsoidal mirror reflector for measuring reflectance
[NASA-CASE-XGS-05291] c23 N71-16341
- Real time reflectometer --- measurement of specular reflectance
[NASA-CASE-WFS-23118-1] c35 N77-31465
- REFLECTORS**
- Method of compactly packaging centrifugally expandable lightweight flexible reflector satellite
[NASA-CASE-XLA-00138] c31 N70-37981
- Antenna design with self erecting mesh reflector
[NASA-CASE-XGS-09190] c31 N71-16102
- Cylindrical reflector for resolving wide angle light beam from telescope into narrow beam for spectroscopic analysis
[NASA-CASE-XGS-08269] c23 N71-26206
- Conical reflector antenna with feed approximating line source
[NASA-CASE-WFO-10303] c07 N72-22127
- Target acquisition antenna feed with reflector system
[NASA-CASE-GSC-10064-1] c10 N72-22235
- Multipurpose microwave antenna, employing dish reflector with plural coaxial horn feeds
[NASA-CASE-WFO-11264] c07 N72-25174
- Characteristics of microwave antenna with conical reflectors to generate plane wave front
[NASA-CASE-WFC-11661] c07 N73-14130
- Schlieren system employing antiparallel reflector in the forward direction
[NASA-CASE-ABC-10971-1] c09 N76-26224
- REFRACTOMETERS**
- Particle size spectrometer and refractometer
[NASA-CASE-WFC-13614-1] c35 N75-19628
- REFRACTORY MATERIALS**
- Test apparatus for determining mechanical properties of refractory materials at high temperatures in vacuum or inert atmospheres
[NASA-CASE-XLE-00335] c14 N70-35368
- Method for producing refractory molybdenum disilicides
[NASA-CASE-XMS-00370] c17 N71-20941
- Prestressed rocket nozzle with ceramic inner rings and refractory metal outer rings
[NASA-CASE-XNP-02888] c18 N71-21068
- Semiconductor device manufacture using refractory dielectrics as diffusant masks and interconnection insulating materials
[NASA-CASE-XER-06476-1] c26 N72-17820
- Electric furnace for vacuum and zero gravity melting of high melting point materials during earth orbit
[NASA-CASE-WFS-20710] c11 N72-23215
- Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LFW-12053-1] c27 N74-34579
- REFRACTORY METALS**
- Refractory filament series circuitry for radiant heater
[NASA-CASE-XLE-00387] c33 N70-34812
- Production of refractory bodies with controlled porosity by pressing and heating mixtures of refractory and inert metal powders
[NASA-CASE-LFW-10393-1] c17 N71-15468
- Multilayer porous refractory metal ionizer design with thick, porous, large-grain substrates and thin, porous micron-grain substrates
[NASA-CASE-XNP-04338] c17 N71-23046
- Brazing alloy adapted for brazing corrosion resistant steel to refractory metals, also for brazing refractory metals to other refractory metals
[NASA-CASE-XNP-03063] c17 N71-23365
- Development and characteristics of thermal radiation shielding of refractory metal foil used for induction furnace
[NASA-CASE-XLE-03432] c33 N71-24145
- Production of high strength refractory compounds and microconstituents into refractory metal matrix
[NASA-CASE-XLE-03940] c18 N71-26153
- Silicide coating process and composition for protection of refractory metals from oxidation
- [NASA-CASE-XLE-10910] c18 N71-29040
- Development of procedure for improved distribution of refractory compounds and micro-constituents in refractory metal matrix
[NASA-CASE-XLE-03940-2] c17 N72-28536
- Fused silicide coatings containing discrete particles for protecting niobium alloys --- used in space shuttle thermal protection systems and turbine engine components
[NASA-CASE-LFW-11179-1] c27 N76-16229
- Method of making an apertured casting --- using duplicate mold
[NASA-CASE-LFW-11169-1] c37 N76-23570
- REFRIGERATING**
- Heat exchanger and decontamination system for multistage refrigeration unit
[NASA-CASE-WFO-10634] c23 N72-25619
- REFRIGERATING MACHINERY**
- Gas balancing, cryogenic refrigeration apparatus with Joule-Thomson valve assembly
[NASA-CASE-WFO-10309] c15 N69-23190
- Method and apparatus for producing very low temperature refrigeration based on gas pressure balance
[NASA-CASE-XNP-08877] c15 N71-23025
- Dual solid cryogenics for spacecraft refrigeration insuring low temperature cooling for extended periods
[NASA-CASE-GSC-10188-1] c23 N71-24725
- Stirling cycle engine and refrigeration systems
[NASA-CASE-WFO-13613-1] c37 N76-29590
- REFRIGERATORS**
- Intermittent type silica gel adsorption refrigerator for providing temperature control for spacecraft components
[NASA-CASE-XNE-00920] c15 N71-15906
- Helium refrigerator
[NASA-CASE-WFO-13435-1] c31 N76-14284
- REGENERATION (ENGINEERING)**
- Switching circuit with regeneratively connected transistors eliminating power consumption when not in use
[NASA-CASE-XNE-02654] c10 N70-42032
- Direct current electromotive system for regenerative braking of electric motor
[NASA-CASE-XNF-01096] c10 N71-16030
- REGENERATIVE COOLING**
- Metal ribbon wrapped outer wall for regeneratively cooled combustion chamber
[NASA-CASE-XLE-00164] c15 N70-36411
- Fabrication method for lightweight regeneratively cooled combustion chamber of channel construction
[NASA-CASE-XLE-00150] c28 N70-41818
- Regenerative cooling system for small rocket engine having restart capability and using noncryogenic hypergolic propellants
[NASA-CASE-XLE-00685] c28 N70-41992
- Regenerative cooling system for rocket combustion chamber using coolant tubes in convergent-divergent nozzle
[NASA-CASE-XLE-04857] c28 N71-23968
- Thermocouple apparatus for measuring wall temperatures in regeneratively cooled rocket engines having thin walled cooling passages
[NASA-CASE-XLE-05230-2] c14 N73-13417
- REGENERATIVE FUEL CELLS**
- Electrolytically regenerative hydrogen-oxygen fuel cells
[NASA-CASE-XLE-04526] c03 N71-11052
- REGENERATORS**
- Loop transponder for regenerating code of au-type ranging system
[NASA-CASE-WFO-11707] c07 N73-25161
- REGISTERS (COMPUTERS)**
- Data processor with plural register stages for selectively interconnecting with each other to effect multiplicity of operations
[NASA-CASE-GSC-10186] c08 N71-33110
- Priority interrupt system --- comprised of four registers
[NASA-CASE-WFO-13067-1] c60 N76-18800
- REINFORCED PLASTICS**
- Process for developing filament reinforced plastic tubes used in research and development programs
[NASA-CASE-LAR-10203-1] c15 N72-16330
- Reinforced structural plastics
[NASA-CASE-LFW-10199-1] c27 N74-23125

- Composite lamination method --- of resin
impregnated fiber tape
[NASA-CASE-LAR-12019-1] c24 N77-22179
- REINFORCING (STRUCTURES)**
Reinforcing beam system for highly flexible
diaphragms in valves or pressure switches
[NASA-CASE-IMP-01962] c32 N70-41370
- Fabrication of light weight panel structure
using pairs of elongate hollow ribs of
semicircular configuration
[NASA-CASE-LAR-11052-1] c32 N73-13929
- REINFORCING FIBERS**
High strength reinforced metallic composites for
applications over wide temperature range
[NASA-CASE-XLE-02428] c17 N70-33288
- Method for producing fiber reinforced metallic
composites with high strength and elasticity
over wide temperature range
[NASA-CASE-XLE-00231] c17 N70-38198
- Description of method for producing metallic
composites reinforced with ceramic and
refractory hard metals that are fibered in place
[NASA-CASE-XLE-03925] c18 N71-22894
- Production and application of sprayable fiber
reinforced ablation material
[NASA-CASE-XLA-04251] c18 N71-26100
- Method of preparing graphite reinforced aluminum
composite
[NASA-CASE-MFS-21077-1] c24 N75-28135
- Composite sandwich lattice structure
[NASA-CASE-LPR-11898-1] c24 N77-15103
- RELAXATION OSCILLATORS**
Voltage controlled, variable frequency
relaxation oscillator with MOSFET variable
current feed
[NASA-CASE-GSC-10022-1] c10 N71-25882
- RELAY SATELLITES**
Earth satellite relay station for frequency
multiplexed voice transmission
[NASA-CASE-GSC-10118-1] c07 N71-24621
- RELEASING**
Bolt-latch mechanism for releasing despin
weights from space vehicle
[NASA-CASE-XLA-00679] c15 N70-38601
- Quick-release coupling for fueling rocket
vehicles with cryogenic propellants
[NASA-CASE-XKS-01985] c15 N71-10782
- Design and development of release mechanism for
spacecraft components, releasable despin
weights, and extensible gravity booms
[NASA-CASE-XGS-06718] c15 N71-24600
- Pneumatic mechanism for releasing hook and loop
fasteners between large rigid structures
[NASA-CASE-XMS-10660-1] c15 N71-25975
- Delayed simultaneous appendage release mechanism
for use on spacecraft equipped with despin
mechanisms and releasable components
[NASA-CASE-GSC-10814-1] c03 N73-20039
- RELIABILITY ANALYSIS**
Development of computer program for estimating
reliability of self-repair and fault-tolerant
systems with respect to selected system and
mission parameters
[NASA-CASE-MFO-13086-1] c15 N73-12495
- RELIABILITY ENGINEERING**
Improving load capacity and fatigue life of
rolling element systems in rockets and missiles
[NASA-CASE-XLE-02999] c15 N71-16052
- Gage for quality control of sealing surfaces of
threaded boss
[NASA-CASE-IMP-04966] c14 N71-17658
- Reliability of automatic refilling valving
device for cryogenic liquid systems
[NASA-CASE-MFO-11177] c15 N72-17453
- Reliability of electrical connectors after heat
sterilization
[NASA-CASE-MFO-10694] c09 N72-20200
- Reliable electrical element heater using plural
wire system and backup power sources
[NASA-CASE-MFS-21462-1] c33 N74-14935
- Hollow rolling element bearings
[NASA-CASE-LEW-11087-3] c37 N74-21064
- RELIEF VALVES**
Relief valve to permit slow and fast bleeding
rates at difference pressure levels
[NASA-CASE-XMS-05894-1] c15 N69-21924
- Describing apparatus for separating gas from
cryogenic liquid under zero gravity and for
venting gas from fuel tank
[NASA-CASE-XLE-00586] c15 N71-15968
- Redundant hydraulic control system for actuators
with three main valve combination
[NASA-CASE-MFS-20944] c15 N73-13466
- REMOTE CONTROL**
Oscillatory electromagnetic mirror drive system
for horizon scanners
[NASA-CASE-XLA-03724] c14 N69-27461
- Stage separation using remote control release of
joint with explosive insert
[NASA-CASE-XLA-02854] c15 N69-27490
- Power controlled bimetallic electromechanical
actuator for accurate, timely, and reliable
response to remote control signal
[NASA-CASE-IMP-09776] c09 N69-39929
- Two component valve assembly for cryogenic
liquid transfer regulation
[NASA-CASE-XLE-00397] c15 N70-36492
- Remotely actuated quick disconnect mechanism for
umbilical cables
[NASA-CASE-XLA-00711] c03 N71-12258
- Remotely actuated quick disconnect for tubular
umbilical conduits used to transfer fluids
from ground to rocket vehicle
[NASA-CASE-XLA-01396] c03 N71-12259
- Remote control device operated by movement of
finger tips for manual control of spacecraft
attitude
[NASA-CASE-XAC-02405] c09 N71-16089
- Satellite radio communication system with remote
steerable antenna
[NASA-CASE-IMP-02389] c07 N71-28900
- Laser beam projector for continuous, precise
alignment between target, laser generator, and
astronomical telescope during tracking
[NASA-CASE-MFO-11087] c25 N71-29125
- Solid state remote circuit selector switching
circuit
[NASA-CASE-LEW-10387] c09 N72-22201
- Design and development of multichannel laser
remote control system using modulated
helium-neon laser as transmitter and light
collector as receiving antenna
[NASA-CASE-LAR-10311-1] c16 N73-16536
- Cooperative multiaxis sensor for teleoperation
of article manipulating apparatus
[NASA-CASE-MFO-13386-1] c54 N75-27758
- Remotely operable articulated manipulator
[NASA-CASE-MFS-22707-1] c37 N76-15457
- Remote manipulator system
[NASA-CASE-MFS-22022-1] c37 N76-15460
- REMOTE HANDLING**
Manipulator for remote handling in zero gravity
environment
[NASA-CASE-MFS-14405] c15 N72-28495
- Apparatus for remote handling of materials ---
mixing or analyzing dangerous chemicals
[NASA-CASE-LAR-10634-1] c37 N74-18123
- An improved controller arm for a remotely
related slave arm
[NASA-CASE-ABC-11052-1] c54 N77-30751
- Anthropomorphic master/slave manipulator system
[NASA-CASE-ABC-10756-1] c54 N77-32721
- REMOTE SENSORS**
Passive optical wind and turbulence remote
detection system
[NASA-CASE-IMP-14032] c20 N71-16340
- Ionization control system design for monitoring
separately located ion gage pressures on
vacuum chambers
[NASA-CASE-XLE-00787] c14 N71-21090
- Flow angle sensor and remote readout system for
use with cryogenic fluids
[NASA-CASE-XLE-04503] c14 N71-24864
- Time synchronization system for synchronizing
clocks at remote locations with master clock
using moon reflected coded signals
[NASA-CASE-MFO-10143] c10 N71-26326
- Development of radiometric sensor to warn
aircraft pilots of region of clear air
turbulence along flight path
[NASA-CASE-BEC-10081] c14 N72-28437
- Development of electronic detection system for
remotely determining number and movement of
enemy personnel
[NASA-CASE-ABC-10097-2] c07 N73-25160
- Microwave power transmission system wherein
level of transmitted power is controlled by
reflections from receiver

REMOTELY PILOTED VEHICLES

SUBJECT INDEX

[NASA-CASE-MFS-21470-1]	c44 N74-19870	[NASA-CASE-IEW-11065-2]	c44 N76-14600
Voltage monitoring system		Composite lamination method --- of resin	
[NASA-CASE-KSC-1C736-1]	c33 N75-19521	impregnated fiber tape	
Remote sensing of vegetation and soil using		[NASA-CASE-LAR-12019-1]	c24 N77-22179
microwave ellipsometry		RESINS	
[NASA-CASE-GSC-11976-1]	c43 N76-23671	Modification of polyurethanes with alkyl halide	
Wind sensor		resins, inorganic salts, and encapsulated	
[NASA-CASE-NFO-13462-1]	c35 N76-24524	volatile and reactive halogen for fuel fire	
Focused laser Doppler velocimeter		control	
[NASA-CASE-MFS-23178-1]	c35 N77-10493	[NASA-CASE-AEC-10098-1]	c06 N71-24739
Wind measurement system		Development of process for bonding resinous body	
[NASA-CASE-MFS-23362-1]	c47 N77-10753	in cavities of honeycomb structures	
Apparatus and method for determining the		[NASA-CASE-MSC-12357]	c15 N73-12489
position of a radiant energy source		Resin for protecting p-n semiconductor junction	
[NASA-CASE-GSC-12147-1]	c35 N77-20410	surface	
Penetrometer --- for determining load bearing		[NASA-CASE-ERC-10339-1]	c18 N73-30532
characteristics of inclined surfaces		RESISTANCE	
[NASA-CASE-NFO-11103-1]	c35 N77-27367	Manufacturing process for making perspiration	
Remote water monitoring system		resistant-stress resistant biopotential	
[NASA-CASE-IAR-11973-1]	c43 N77-28563	electrode	
REMOTELY PILOTED VEHICLES		[NASA-CASE-MSC-90153-2]	c05 N72-25120
Rotating launch device for a remotely piloted		Variable resistance constant tension and	
aircraft		lubrication device --- using oil-saturated	
[NASA-CASE-ARC-1C979-1]	c09 N77-19076	leather wiper	
REMOVAL		[NASA-CASE-KSC-10723-1]	c37 N75-13265
Catalyst bed element removing tool		RESISTANCE HEATING	
[NASA-CASE-XFR-00811]	c15 N70-36901	High resistance cross flow heat exchangers for	
Stator rotor coils		electrothermal rocket engines	
[NASA-CASE-MSC-16000-1]	c07 N77-13062	[NASA-CASE-XIE-01783]	c28 N70-34175
RENDEROUS SPACECRAFT		RESISTORS	
Tetherline system for orbiting satellites		High isolation RF signal selection switches	
[NASA-CASE-MFS-23564-1]	c13 N77-11079	[NASA-CASE-NFO-13081-1]	c33 N74-22814
REPEATERS		Resistive anode image converter	
Time division relay synchronizer with master		[NASA-CASE-BQN-10876-1]	c33 N76-27473
sync pulse for activating binary counter to		RESOLUTION	
produce signal identifying time slot for station		Conversion system for increasing resolution of	
[NASA-CASE-GSC-10373-1]	c07 N71-19773	analog to digital converters	
REPLACING		[NASA-CASE-XAC-00404]	c08 N70-40125
Indexing mechanism for cathode array		Cylindrical reflector for resolving wide angle	
substitution in electron beam tube		light beam from telescope into narrow beam for	
[NASA-CASE-NFO-10625]	c09 N71-26182	spectroscopic analysis	
RESCUE OPERATIONS		[NASA-CASE-XGS-08269]	c23 N71-26206
Backpack carrier with retractable legs suitable		RESOLVERS	
for lunar exploration and convertible to		Differential phase shift keyed signal resolver	
rescue vehicle		[NASA-CASE-MSC-14066-1]	c33 N74-27705
[NASA-CASE-IAR-10056]	c05 N71-12351	RESONANCE	
Development and characteristics of rescue litter		Optically selective, acoustically resonant gas	
with inflatable flotation device for water		detecting transducer	
rescue application		[NASA-CASE-ARC-10639-1]	c35 N77-19388
[NASA-CASE-XMS-04170]	c05 N71-22748	RESONANT FREQUENCIES	
High visibility air sea rescue panel		Vibrating element electrometer producing high	
[NASA-CASE-MSC-12564-1]	c54 N76-15792	conversion gain by input current control of	
Method of locating persons in distress --- by		elements resonant frequency displacement	
using radar imagery from radar reflectors		amplitude	
[NASA-CASE-LAR-11390-1]	c32 N77-21267	[NASA-CASE-XAC-02807]	c09 N71-23021
RESEARCH AND DEVELOPMENT		Quantitative liquid measurements in container by	
Process for developing filament reinforced		resonant frequencies	
plastic tubes used in research and development		[NASA-CASE-XNF-02500]	c18 N71-27397
programs		Development of electrical circuit for	
[NASA-CASE-IAR-10203-1]	c15 N72-16330	suppressing oscillations across inductor	
RESEARCH VEHICLES		operating in resonant mode	
Lunar landing flight research vehicle		[NASA-CASE-ERC-10403-1]	c10 N73-26228
[NASA-CASE-XFR-0C929]	c31 N70-34966	A CW ultrasonic bolt tensioning monitor	
Velocity limiting safety system for motor driven		[NASA-CASE-LAR-12016-1]	c32 N77-15236
research vehicle		RESONATORS	
[NASA-CASE-XLA-07473]	c15 N71-24895	Selective bandpass resonators using bandstop	
RESIDUAL STRESS		resonator pairs for microwave frequency	
Miniature solid state, direction sensitive,		operation	
stress transducer design with bonded		[NASA-CASE-GSC-10990-1]	c09 N73-26195
semiconductive piezoresistive element for		RESPIRATION	
sensing residual stresses		Respiration analyzing method and apparatus for	
[NASA-CASE-XNF-02983]	c14 N71-21091	determining subjects oxygen consumption in	
Manufacturing process for making perspiration		aerospace environments	
resistant-stress resistant biopotential		[NASA-CASE-XFR-08403]	c05 N71-11202
electrode		RESPIRATORS	
[NASA-CASE-MSC-90153-2]	c05 N72-25120	Transducer for monitoring oxygen flow in	
RESILIENCE		respirator	
Automated ball rebound resilience test equipment		[NASA-CASE-FRC-10012]	c14 N72-17329
for determining viscoelastic properties of		RESPIRATORY RATE	
polymers		Flowmeters for sensing low fluid flow rate and	
[NASA-CASE-XLA-08254]	c14 N71-26161	pressure for application to respiration rate	
RESIN BONDING		studies	
Procedure for bonding polytetrafluoroethylene		[NASA-CASE-FRC-10022]	c12 N71-26546
thermal protective sleeves to magnesium alloy		Respiratory analysis system to determine gas	
conical shell components with different		flow rate and frequency of respiration and	
thermal coefficients		expiration cycles in real time	
[NASA-CASE-XIA-01262]	c15 N71-21404	[NASA-CASE-MSC-13436-1]	c05 N73-32015
Covered silicon solar cells and method of		Metabolic analyzer --- for measuring metabolic	
manufacture --- with polymeric films		rate and breathing dynamics of human beings	

SUBJECT INDEX

RING STRUCTURES

[NASA-CASE-MFS-21415-1] c52 N74-20728

BESPIROMETERS
Metabolic analyzer --- for measuring metabolic rate and breathing dynamics of human beings
[NASA-CASE-MFS-21415-1] c52 N74-20728

BESPECSSES
System for monitoring condition responsive devices by using frequency division multiplex technique
[NASA-CASE-KSC-10521] c07 N73-20176

BESTARTABLE ROCKET ENGINES
Collapsible auxiliary tank for restarting liquid propellant rocket motors under zero gravity
[NASA-CASE-INP-01390] c28 N70-41275
Regenerative cooling system for small rocket engine having restart capability and using noncryogenic hypergolic propellants
[NASA-CASE-IIE-00685] c28 N70-41992

BESUSCITATION
Pulmonary resuscitation method and apparatus with adjustable pressure regulator
[NASA-CASE-IHS-01115] c05 N70-39922

BETARDING
Ablative resins used for retarding regression in ablative material
[NASA-CASE-IIE-05913] c33 N71-14032

BETICLES
Optical tracker with pair of PM reticles having patterns 90 deg out of phase
[NASA-CASE-IGS-05715] c23 N71-16100
Method for producing reticles for use in outer space
[NASA-CASE-GSC-11188-2] c21 N73-19630
Production method of star tracking reticles for transmitting in visible and near ultraviolet regions
[NASA-CASE-GSC-11188-1] c14 N73-32320
Formation of star tracking reticles
[NASA-CASE-GSC-11188-3] c74 N74-20008
Star scanner --- with a reticle with a pair of slits having differing separation
[NASA-CASE-GSC-11569-1] c89 N74-30886

BETRACABLE EQUIPMENT
Retractable runway lights
[NASA-CASE-XIA-00119] c11 N70-33329
Support for flexible conductor cable between drawers or racks holding electronic equipment and cabinet assembly housing drawers or racks
[NASA-CASE-XMF-07587] c15 N71-18701

BETROFIBING
Visual target luminaires for retrofire attitude control
[NASA-CASE-XMS-12158-1] c31 N69-27499
Device for use in descending spacecraft as altitude sensor for actuating deceleration retrorockets
[NASA-CASE-XMS-03792] c14 N70-41812

BETROREFLECTIC
Servo system for retroreflector of Michelson interferometer
[NASA-CASE-NPO-10300] c14 N71-17662

BETROCKET ENGINES
Steerable solid propellant rocket motor adapted to effect payload orientation as multistage rocket stage or reduce velocity as retrorocket
[NASA-CASE-INP-00234] c28 N70-38645

REUSABLE SPACECRAFT
Recoverable, reusable single stage booster capable of injecting large payloads into circular earth orbit
[NASA-CASE-XMF-01973] c31 N70-41588
Spacecraft configurations and aerodynamic characteristics of space shuttle systems with two reusable stages
[NASA-CASE-MSC-12433] c31 N73-14854

REUSE
Silica reusable surface insulation
[NASA-CASE-AEC-10721-1] c27 N76-22376

REVERSED FLOW
Multistage multiple reentry axial flow reaction turbine with reverse flow reentry ducting
[NASA-CASE-XLE-00170] c15 N70-36412
Reversible current directing circuitry for reversible motor control
[NASA-CASE-XIA-09371] c10 N71-18724
Positive locking check valve for stopping reversed flow
[NASA-CASE-XMS-09310] c15 N71-22706

Reverse pitch fan with divided splitter
[NASA-CASE-LEW-12760-1] c07 N77-17059

REYNOLDS NUMBER
Wind tunnel test section for simulating high Reynolds number over transonic speed range
[NASA-CASE-MFS-20509] c11 N72-17183

REYNOLDS STRESS
System for measuring Reynolds in a turbulently flowing fluid --- signal processing
[NASA-CASE-ABC-10755-2] c34 N76-27517

RENIUM
Thermocouples of tantalum and rhenium alloys for more stable vacuum-high temperature performance
[NASA-CASE-LEW-12050-1] c35 N77-32454

RIBBONS
Metal ribbon wrapped outer wall for regeneratively cooled combustion chamber
[NASA-CASE-XLE-00164] c15 N70-36411
Device for bending metal ribbon or wire
[NASA-CASE-XIA-05966] c15 N72-12408
Controlled diffusion reaction process for masking substrate of twisted multifilament superconductive ribbon
[NASA-CASE-LEW-11726-1] c26 N73-26752
Apparatus for assembling space structure
[NASA-CASE-MFS-23579-1] c12 N77-31213

RIBOFLAVIN
Bioassay of flavin coenzymes
[NASA-CASE-GSC-10565-1] c06 N72-25149

RIBS (SUPPORTS)
Aeroflexible wing structure with air scoop for inflating stiffeners with ram air
[NASA-CASE-XIA-06095] c01 N69-39981
Fabrication of light weight panel structure using pairs of elongate hollow ribs of semicircular configuration
[NASA-CASE-LAR-11052-1] c32 N73-13929

RICE
Rice preparation process consisting of cooking, two freezing-thawing cycles, and then freeze drying
[NASA-CASE-MSC-13540-1] c05 N72-33096

RIGID ROTORS
Hingeless helicopter rotor with improved stability
[NASA-CASE-AEC-10807-1] c05 N77-17029

RIGID STRUCTURES
Pneumatic mechanism for releasing hook and loop fasteners between large rigid structures
[NASA-CASE-XMS-10660-1] c15 N71-25975
Storage stable, thermally activated foaming compositions for erecting and rigidizing mechanisms of thin sheet solar collectors
[NASA-CASE-LAR-10373-1] c18 N71-26155
Adjustable rigid mount for trihedral mirror formed of alloy with small coefficient of thermal expansion supporting screws and spring-biased plates
[NASA-CASE-INP-08907] c23 N71-29123
Folding structure fabricated of rigid panels
[NASA-CASE-XHQ-02146] c18 N75-27040
Composite sandwich lattice structure
[NASA-CASE-LAR-11898-2] c24 N77-26242

RIGID WINGS
Deployment system for flexible wing with rigid superstructure
[NASA-CASE-XIA-01220] c02 N70-41863

RING CURRENTS
Design of transistorized ring counter circuit with special steering and triggering circuits
[NASA-CASE-IGS-03095] c09 N69-27463

RING STRUCTURES
Reversible ring counter using cascaded single silicon controlled rectifier stages
[NASA-CASE-XGS-01473] c09 N71-10673
Nonreusable energy absorbing device comprising ring member with plurality of recesses, cutting members, and guide member mounted in each recess
[NASA-CASE-XMF-10040] c15 N71-22877
Phase-locked servo system --- for synchronizing the rotation of slip ring assembly
[NASA-CASE-MFS-22073-1] c33 N75-13139
Laser system with an antiresonant optical ring
[NASA-CASE-HQN-10844-1] c36 N75-19653
Liquid metal slip ring
[NASA-CASE-LEW-12277-1] c33 N76-28472
Collapsible corrugated horn antenna
[NASA-CASE-LAR-11745-1] c32 N77-24339

RING WINGS

Design of ring wing vehicle of high
drag-to-weight ratio to withstand reentry
stress into low density atmosphere
[NASA-CASE-XIA-04901] c31 N71-24315

RIPPLES

Circuit for monitoring power supply by ripple
current indication
[NASA-CASE-KSC-10162] c09 N72-11225

RIVETS

Electrical connection for printed circuits on
common board, using bellows principle in rivet
[NASA-CASE-XNP-05082] c15 N70-41960

ROCKET ENGINE CASES

Method for shaping regeneratively cooled rocket
motor casing having minimum thickness at each
channel cross section
[NASA-CASE-XIE-00409] c28 N71-15658

Regeneratively cooled rocket motor casing with
tapered channels to insure minimum thicknesses
at each channel cross section for necessary
strength requirements
[NASA-CASE-XIE-05689] c28 N71-15659

Payload/spent rocket engine case separation system
[NASA-CASE-XIA-05369] c31 N71-15687

Liner for hybrid solid propellants to bind
propellant to rocket motor case
[NASA-CASE-XNP-09744] c27 N71-16392

Permanently magnetized ion engine casing
construction for use in spacecraft propulsion
systems
[NASA-CASE-XNP-06942] c28 N71-23293

Casting propellant in rocket engine
[NASA-CASE-LRB-11995-1] c28 N77-10213

Solid propellant rocket motor and method of
making same
[NASA-CASE-XIA-1349] c20 N77-17143

ROCKET ENGINE DESIGN

High thrust annular liquid propellant rocket
engine and exhaust nozzle design
[NASA-CASE-XIE-00078] c28 N70-33284

Spherical solid propellant rocket engine design
[NASA-CASE-XIA-00105] c28 N70-33331

Spherical solid propellant rocket engine having
abrupt throat
[NASA-CASE-XHQ-01897] c28 N70-35381

Metal ion rocket engine design
[NASA-CASE-XIE-00342] c28 N70-37980

Improvement in rocket engine performance with
swirling flow exhaust nozzle development
[NASA-CASE-XNP-03692] c28 N71-24321

Characteristics of ion rocket engine with
combination keeper electrode and electron baffle
[NASA-CASE-NFO-11880] c28 N73-24783

Supersonic combustion rocket
[NASA-CASE-LEW-11058-1] c20 N74-13502

Rocket chamber and method of making
[NASA-CASE-LEW-11118-2] c20 N76-14191

System for imposing directional stability on a
rocket-propelled vehicle
[NASA-CASE-MFS-21311-1] c20 N76-21275

ROCKET ENGINES

Channel-type shell construction for rocket
engines and related configurations
[NASA-CASE-XIE-00144] c28 N70-34860

Encapsulated heater forming hollow body for
cathode used in ion thruster
[NASA-CASE-LEW-10814-1] c28 N70-35422

Apparatus for cooling and injecting hypergolic
propellants into combustion chamber of small
rocket engine
[NASA-CASE-XIE-00303] c15 N70-36535

Elastic universal joint for rocket motor mounting
[NASA-CASE-XNP-00416] c15 N70-36947

Water electrolysis rocket engine with self-
regulating stoichiometric fuel mixing regulator
[NASA-CASE-XES-08729] c28 N71-14044

Method for igniting solid propellant rocket
motors by injecting hypergolic fluids
[NASA-CASE-XIE-01988] c27 N71-15634

Laminar flow of liquid coolants in rocket engines
[NASA-CASE-NFO-10122] c12 N71-17631

Improvement in rocket engine performance with
swirling flow exhaust nozzle development
[NASA-CASE-XNP-03692] c28 N71-24321

System for removing and repairing spacecraft
control thrusters by use of portable air locks
[NASA-CASE-MFS-20325] c28 N71-27095

Device for back purging thrust engines
[NASA-CASE-XHS-04826] c28 N71-28849

Development of method for cooling high
temperature wall members with cooling medium
having high heat absorption capability
[NASA-CASE-BGN-00938] c33 N71-29053

Automatic shunting of ion thruster magnetic
field when thruster is not operating
[NASA-CASE-LEW-10835-1] c28 N72-22771

Vacuum chamber with scale model of rocket engine
base area of space vehicle
[NASA-CASE-MFS-20620] c11 N72-27262

Thermocouple apparatus for measuring wall
temperatures in regeneratively cooled rocket
engines having thin walled cooling passages
[NASA-CASE-XIE-05230-2] c14 N73-13417

Improving performance of magnetoplasmadynamic
arc rocket engine
[NASA-CASE-LEW-11180-1] c25 N73-25760

Method of electroforming a rocket chamber
[NASA-CASE-LEW-11118-1] c20 N74-32919

Device for installing rocket engines
[NASA-CASE-MFS-19220-1] c20 N76-22296

Molded composite pyrogen igniter for rocket motors
[NASA-CASE-LAB-12018-1] c20 N76-29365

Ion beam thruster shield
[NASA-CASE-LEW-12082-1] c20 N77-10148

Anode for ion thruster
[NASA-CASE-LEW-12048-1] c20 N77-20162

Low thrust monopropellant engine
[NASA-CASE-GSC-12194-1] c20 N77-28219

ROCKET EXHAUST

Thrust vector control by secondary injection of
fluid into rocket nozzle flow field to
separate exhaust flow
[NASA-CASE-XIE-00208] c28 N70-34294

Development of vortex fluid amplifier for
throttling rocket exhaust
[NASA-CASE-LEW-10374-1] c28 N73-13773

ROCKET FIRING

Design and characteristics of linkage to
alleviate rocket vehicle divergence during
launch
[NASA-CASE-XIA-00256] c31 N71-15663

ROCKET FLIGHT

Development of technique for control of free
flight rocket vehicles
[NASA-CASE-XIA-00937] c31 N71-17691

ROCKET LAUNCHING

Design and characteristics of linkage to
alleviate rocket vehicle divergence during
launch
[NASA-CASE-XIA-00256] c31 N71-15663

Controlled release device for use in launching
rockets or missiles
[NASA-CASE-XRS-03338] c15 N71-24043

ROCKET NOZZLES

Gimbaled partially submerged nozzle for solid
propellant rocket engines for providing
directional control
[NASA-CASE-XNP-01544] c28 N70-34162

Large area-ratio nozzles for rocket motor thrust
chambers
[NASA-CASE-XIE-00145] c28 N70-36806

Flexible rocket motor nozzle closure device to
aid ignition and protect rocket chamber from
foreign objects
[NASA-CASE-XIA-02651] c28 N70-41967

Automatically deploying nozzle exit cone extension
[NASA-CASE-XIE-01640] c31 N71-15637

Method for testing rocket nozzles at high
tensile stress levels
[NASA-CASE-NFO-10311] c31 N71-15643

Development of collapsible nozzle extension for
rocket engines
[NASA-CASE-MFS-11497] c28 N71-16224

Camera protecting device for use in
photographing rocket engine nozzles or other
engine components
[NASA-CASE-NFO-10174] c14 N71-18465

Multislit film cooled pyrolytic graphite rocket
nozzle
[NASA-CASE-XNP-04389] c28 N71-20942

Prestressed rocket nozzle with ceramic inner
rings and refractory metal outer rings
[NASA-CASE-XNP-02888] c18 N71-21068

Improvement in rocket engine performance with
swirling flow exhaust nozzle development
[NASA-CASE-XNP-03692] c28 N71-24321

SUBJECT INDEX

ROTATING DISKS

- Development of method for cooling high temperature wall members with cooling medium having high heat absorption capability
[NASA-CASE-HCN-00938] c33 N71-29053
- Inflatable rocket engine nozzle skirt with transpiration cooling
[NASA-CASE-HFS-20619] c28 N72-11708
- Thin walled nozzle with insulative nonablative coating for solid propellant rocket engines
[NASA-CASE-NFO-11458] c28 N72-23810
- ROCKET OXIDIZERS**
Preparing oxidizer coated metal fuel particles
[NASA-CASE-NFO-11975-1] c28 N74-33209
- ROCKET PROPELLANTS**
Solenoid two-step valve for bipropellant flow rate control to rocket engine
[NASA-CASE-XMS-04890-1] c15 N70-22192
- Rocket engine injector orifice to accommodate changes in density, velocity, and pressure, thereby maintaining constant mass flow rate of propellant into rocket combustion chamber
[NASA-CASE-XLE-03157] c28 N71-24736
- Bipropellant injector with pair of concave deflector plates
[NASA-CASE-XNP-09461] c28 N72-23809
- Nitramine propellants
[NASA-CASE-NFO-14103-1] c28 N77-25346
- ROCKET TEST FACILITIES**
High-vacuum condenser tank for testing ion rocket engines
[NASA-CASE-XLE-00168] c11 N70-33278
- Micro-pound extended range thrust stand for small rocket engines
[NASA-CASE-GSC-10710-1] c28 N71-27094
- ROCKET THRUST**
Solid propellant rocket vehicle thrust control method and apparatus
[NASA-CASE-XNP-00217] c28 N70-38181
- High voltage insulators for direct current in acceleration system of electrostatic thruster
[NASA-CASE-XLE-01902] c28 N71-10574
- Characteristics of solid propellant rocket engine with controlled rate of thrust buildup operating in vacuum environment
[NASA-CASE-NFO-11559] c28 N73-24784
- Thrust measurement
[NASA-CASE-XMS-05731] c35 N75-29382
- ROCKET VEHICLES**
Uniball separator for rockets
[NASA-CASE-XNP-00425] c11 N70-38202
- Hydraulic support equipment for full scale dynamic testing of large rocket vehicle under free flight conditions
[NASA-CASE-XNP-01772] c11 N70-41677
- Design and characteristics of linkage to alleviate rocket vehicle divergence during launch
[NASA-CASE-XLA-00256] c31 N71-15663
- Development of technique for control of free flight rocket vehicles
[NASA-CASE-XLA-00937] c31 N71-17691
- ROCKET-BORNE INSTRUMENTS**
Rocket-borne aspect sensor consisting of radiation sensor, apertured disk, commutator, and counting circuits
[NASA-CASE-XGS-08266] c14 N69-27432
- General purpose rocket furnace
[NASA-CASE-HFS-23460-1] c09 N77-12070
- ROCKETS**
Device for detecting hydrogen fires onboard high altitude rockets
[NASA-CASE-HFS-13130] c10 N72-17173
- ROCKS**
Rotary impact-type rock drill for recovering rock cuttings
[NASA-CASE-XNP-07478] c14 N69-21923
- Rock sampling --- apparatus for controlling particle size
[NASA-CASE-XNP-10007-1] c46 N74-23068
- Rock sampling --- method for controlling particle size distribution
[NASA-CASE-XNP-09755] c46 N74-23069
- RODS**
Nuclear thermionic converter --- tungsten-thorium oxide rods
[NASA-CASE-NFO-13121-1] c73 N77-18891
- ROLL**
Measuring roll alignment of test body with respect to reference body
[NASA-CASE-GSC-10514-1] c14 N72-20379
- ROLLER BEARINGS**
Solid lubricant applied to porous roller bearings prior to use in ultrahigh vacuum
[NASA-CASE-XLE-09527] c15 N71-17688
- Semilinear bearing comprising two rows of roller bearings separated by spherical bearings and permitting rotational and translational movement
[NASA-CASE-XLA-02809] c15 N71-22982
- Low mass rolling element bearing assembly
[NASA-CASE-LEW-11087-1] c15 N73-30458
- Method of making rolling element bearings
[NASA-CASE-LEW-11087-2] c37 N74-15128
- Bearing material --- composite material with low friction surface for rolling or sliding contact
[NASA-CASE-LEW-11930-1] c24 N76-22309
- ROLLERS**
Improving load capacity and fatigue life of rolling element systems in rockets and missiles
[NASA-CASE-XLE-02999] c15 N71-16052
- Load regulating latch
[NASA-CASE-HSC-19535-1] c37 N77-32499
- ROLLING CONTACT LOADS**
Development of rolling element bearing for operation in ultrahigh vacuum environment
[NASA-CASE-XLE-09527-2] c15 N71-26189
- ROLLING MOMENTS**
Star sensor system for roll attitude control of spacecraft
[NASA-CASE-XNP-01307] c21 N70-41856
- ROOM TEMPERATURE**
Process permitting application of synthetic resin coating to irregular-shaped objects at ambient temperature
[NASA-CASE-XNP-06508] c18 N69-39895
- ROTARY STABILITY**
Drive mechanism for operating reactance attitude control system for aerospace bodies
[NASA-CASE-XNP-01598] c21 N71-15583
- Combination guide and rotary bearing for freely moving shaft
[NASA-CASE-XLA-00013] c15 N71-29136
- Lubricated journal bearing
[NASA-CASE-LEW-11076-3] c37 N75-30562
- Rotary leveling base platform
[NASA-CASE-ABC-10981-1] c35 N77-10498
- Cyclical bi-directional rotary actuator
[NASA-CASE-GSC-11883-1] c37 N77-19458
- ROTARY WING AIRCRAFT**
Aircraft control system for rotary wing aircraft
[NASA-CASE-ERC-10439] c02 N73-19004
- ROTARY WINGS**
Variable geometry rotor system for direct control over wake vortex
[NASA-CASE-LAR-10557] c02 N72-11018
- Hingeless helicopter rotor with improved stability
[NASA-CASE-ABC-10807-1] c05 N77-17029
- Automatically lockable axially extensible strut --- for helicopters
[NASA-CASE-LAR-11900-1] c05 N77-18134
- Acoustically swept rotor
[NASA-CASE-ABC-11106-1] c05 N77-31130
- ROTATING BODIES**
Optical scanner mounted on rotating support structure with method of compensating for image or satellite rotation
[NASA-CASE-IGS-02401] c14 N69-27485
- Laser device for removing material from rotating object for dynamic balancing
[NASA-CASE-HFS-11279] c16 N71-20400
- Phase-locked servo system --- for synchronizing the rotation of slip ring assembly
[NASA-CASE-HFS-22073-1] c33 N75-13139
- Rotating joint signal coupler
[NASA-CASE-LAR-11264-1] c33 N75-27261
- An improved rotatable mass for a flywheel
[NASA-CASE-HFS-23051-1] c37 N76-13500
- Annular momentum control device used for stabilization of space vehicles and the like
[NASA-CASE-LAR-11051-1] c15 N76-14158
- Axially and radially controllable magnetic bearing
[NASA-CASE-GSC-11551-1] c37 N76-18459
- Multiple in-line docking capability for rotating space stations
[NASA-CASE-HFS-20855-1] c15 N77-10112
- ROTATING DISKS**
Foil seal between parts moving relative to each other
[NASA-CASE-XLE-05130] c15 N69-21362

- Rocket-borne aspect sensor consisting of radiaticn sensor, apertured disk, commutator, and cccurting circuits
[NASA-CASE-XGS-06266] c14 N69-27432
- ROTATING ELECTRICAL MACHINES**
- Modulating and controlling intensity of light beam from high temperature source by servocontrolled rotating cylinders
[NASA-CASE-XMS-04300] c09 N71-19479
- Design and development of electric motor with stationary field and armature windings which operates on direct current
[NASA-CASE-XGS-05290] c09 N71-25999
- Double-induction variable speed system for constant-frequency electrical power generation
[NASA-CASE-FEC-10065] c09 N71-27364
- ROTATING ENVIRONMENTS**
- Radial module manned space station with artificial gravity environment
[NASA-CASE-XMS-01906] c31 N70-41373
- Artificial gravity system for simulating self-locomotion capability of astronauts in rotating environments
[NASA-CASE-XIA-03127] c11 N71-10776
- ROTATING GENERATORS**
- Rotating raster generator
[NASA-CASE-FEC-10071-1] c32 N74-20813
- ROTATING MIRRORS**
- Optical retrodirective modulator with focus spoiling reflector driven by modulation signal
[NASA-CASE-GSC-10062] c14 N71-15605
- Attitude sensor with scanning mirrors for detecting orientation of space vehicle with respect to planet
[NASA-CASE-XIA-00793] c21 N71-22880
- Optical device containing rotatable prism and reflecting mirror for generating precise angles
[NASA-CASE-XGS-04173] c19 N71-26674
- Method and apparatus for optically monitoring the angular position of a rotating mirror
[NASA-CASE-GSC-11353-1] c74 N74-21304
- ROTATING SHAFTS**
- Fluid seal formed by flexible disk on rotating shaft to retain lubricating oils around shaft
[NASA-CASE-XIE-05130-2] c15 N71-19570
- Anemometer with braking mechanism to prevent rotation of wind driven elements
[NASA-CASE-XMF-05224] c14 N71-23726
- Electromagnetic braking arrangement for controlling rotor rotation in electric motor
[NASA-CASE-XMF-06936] c15 N71-24695
- Liquid-vapor interface seal design for turbine rotating shafts including helical and molecular pumps and liquid cooling of mercury vapor
[NASA-CASE-XMF-02862-1] c15 N71-26294
- Combinatoric guide and rotary bearing for freely moving shaft
[NASA-CASE-XLA-00013] c15 N71-29136
- Development of Hall effect transducer for converting mechanical shaft rotations into proportional electrical signals
[NASA-CASE-LAE-10620-1] c09 N72-25255
- Development of optical system for detecting defective components in rotating machinery with emphasis on bearing assemblies
[NASA-CASE-RSC-10752-1] c15 N73-27407
- Spiral groove seal --- for rotating shaft
[NASA-CASE-XIE-10326-4] c37 N74-15125
- Digital servo controller --- for rotating antenna shaft
[NASA-CASE-RSC-10769-1] c33 N74-29556
- Solid medium thermal engine
[NASA-CASE-ARC-10461-1] c44 N74-33379
- Ergometer calibrator --- for any ergometer utilizing rotating shaft
[NASA-CASE-MFS-21045-1] c35 N75-15932
- Fluid seal for rotating shafts
[NASA-CASE-LFW-11676-1] c37 N76-22541
- Actuator mechanism
[NASA-CASE-GSC-11883-2] c37 N77-15400
- Cyclical bi-directional rotary actuator
[NASA-CASE-GSC-11883-1] c37 N77-19458
- A rotary electric device
[NASA-CASE-GSC-12138-1] c33 N77-20344
- Tachometer
[NASA-CASE-MFS-23175-1] c35 N77-30436
- ROTATION**
- Semilinear bearing comprising two rows of roller bearings separated by spherical bearings and permitting rotational and translational movement
[NASA-CASE-XLA-02809] c15 N71-22962
- Mechanical actuator wherein linear motion changes to rotational motion
[NASA-CASE-XGS-04548] c15 N71-24045
- Positioning mechanism for converting translatory motion into rotary motion
[NASA-CASE-NFO-10679] c15 N72-21462
- ROTOR AERODYNAMICS**
- Acoustically swept rotor
[NASA-CASE-ARC-11106-1] c05 N77-31130
- ROTOR BLADES**
- Nondestructive method for instrumenting helicopter rotor blades
[NASA-CASE-IAR-11201-1] c35 N77-22452
- ROTOR BLADES (TURBOMACHINERY)**
- Locking device for retaining turbine rotor blades on turbine wheel
[NASA-CASE-XNF-00816] c28 N71-28928
- Blade vibration damping pins for turbomachinery
[NASA-CASE-XIE-00155] c28 N71-29154
- Apparatus for welding blades to rotors
[NASA-CASE-LEW-10533-2] c37 N74-11300
- Supersonic fan blading --- noise reduction in turbofan engines
[NASA-CASE-LFW-11402-1] c07 N74-28226
- Apparatus and method for reducing thermal stress in a turbine rotor
[NASA-CASE-LFW-12232-1] c07 N77-18160
- Blade retainer assembly
[NASA-CASE-LEW-12608-1] c07 N77-27116
- Platform for a swing root turbomachinery blade
[NASA-CASE-LFW-12312-1] c07 N77-32148
- ROTOR LIFT**
- Constant lift rotor for a heavier than air craft
[NASA-CASE-ARC-11045-1] c05 N77-28111
- ROTOR SPEED**
- Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
[NASA-CASE-MFS-20385] c09 N71-24904
- ROTORS**
- Multistage, multiple reentry, single rotor, axial flow turbine
[NASA-CASE-XIE-00085] c28 N70-39895
- Describing angular position and velocity sensing apparatus
[NASA-CASE-XGS-05680] c14 N71-17585
- Microwave waveguide switch with rotor position control
[NASA-CASE-XNF-06507] c09 N71-23548
- Electromagnetic braking arrangement for controlling rotor rotation in electric motor
[NASA-CASE-XMF-06936] c15 N71-24695
- Rotary vane attenuator with two stators and intermediary rotor, using resistive and orthogonally disposed cards
[NASA-CASE-NFO-11418-1] c14 N73-13420
- Process for welding compressor and turbine blades to rotors and discs of jet engines
[NASA-CASE-LEW-10533-1] c15 N73-28515
- Liquid metal slip ring
[NASA-CASE-LEW-12277-1] c33 N76-28472
- RUBBER**
- Rubber composition for expulsion bladders and diaphragms for use with hydrazine
[NASA-CASE-NFO-11433] c18 N71-31140
- Formulated plastic separators for soluble electrode cells --- rubber-ion transport sheeting
[NASA-CASE-LEW-12358-1] c44 N77-18560
- RUBBER COATINGS**
- Intumescent paint containing nitrile rubber for fire protection
[NASA-CASE-ARC-10196-1] c18 N73-13562
- RUBY**
- Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-1] c37 N75-15992
- Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-3] c24 N76-19234
- RUBY LASERS**
- Cooling and radiation protection of ruby lasers using copper sulfate solution in alcohol
[NASA-CASE-MFS-20180] c16 N72-12440
- RUNWAY ALIGNMENT**
- Magnetic method for detection of aircraft position relative to runway

[NASA-CASE-ARC-10179-1] c21 N72-22619
RUNWAY LIGHTS
 Retractable runway lights
 [NASA-CASE-XIA-00119] c11 N70-33329
 Spectrally balanced chromatic landing approach
 lighting system
 [NASA-CASE-ARC-10990-1] c04 N77-12031
RUPTURING
 Knife structure for controlling rupture of shock
 tube diaphragms
 [NASA-CASE-XAC-00731] c11 N71-15960

S

SAFETY

Safety flywheel
 [NASA-CASE-BQN-10888-1] c37 N77-22484

SAFETY DEVICES

Helmet and torso tie-down mechanism for
 shortening pressure suits upon inflation
 [NASA-CASE-XMS-00784] c05 N71-12335
 Positive locking check valve for stopping
 reversed flow
 [NASA-CASE-XMS-09310] c15 N71-22706
 Description of protective device for providing
 safe operating conditions around work piece in
 machine or metal working tool
 [NASA-CASE-XLE-01092] c15 N71-22797
 Velocity limiting safety system for motor driven
 research vehicle
 [NASA-CASE-XLP-07473] c15 N71-24895
 Device for generating and controlling combustion
 products for testing of fire detection system
 [NASA-CASE-GSC-11095-1] c14 N72-10375
 Restraint torso for increased mobility and
 reduced physiological effects while wearing
 pressurized suits
 [NASA-CASE-MSC-12397-1] c05 N72-25119
 Totally confined explosive welding --- apparatus
 to reduce noise level and protect personnel
 during explosive bonding
 [NASA-CASE-XLR-10941-1] c37 N74-21057
 Deployable flexible ventral fins for use as an
 emergency spin recovery device in aircraft
 [NASA-CASE-LAR-10753-1] c08 N74-30421
 Shoulder harness and lap belt restraint system
 [NASA-CASE-ARC-10519-2] c05 N75-25915
 Fifth wheel
 [NASA-CASE-FRC-10081-1] c37 N77-14477
 An improved vehicular impact absorption system
 [NASA-CASE-NFO-14014-1] c37 N77-31501

SARA EQUATIONS

Cosmic dust analyzer
 [NASA-CASE-MSC-13802-2] c35 N76-15431

SALT BATHS

Application techniques for protecting materials
 during salt bath brazing
 [NASA-CASE-XLE-00046] c15 N70-33311

SAMARIUM

Gadolinium or samarium doped-silicon
 semiconductor material with resistance to
 radiation damage for use in solar cells
 [NASA-CASE-XLE-10715] c26 N71-23292

SAMPLES

Portable vacuum probe surface sampler for
 sampling large surface areas with relatively
 light loading densities of microorganisms
 [NASA-CASE-LAR-10623-1] c14 N73-30395

SAMPLES

Automatic multiple-sample applicator and
 electrophoresis apparatus
 [NASA-CASE-ARC-10991-1] c25 N77-12157

SAMPLING

Impact bit for cutting, collecting, and storing
 samples such as lunar rock cuttings
 [NASA-CASE-XNP-01412] c15 N70-42034
 Design and development of fluid sample collector
 [NASA-CASE-XMS-06767-1] c14 N71-20435
 Design and development of two types of
 atmosphere sampling chambers
 [NASA-CASE-NFO-11373] c13 N72-25323
 Digital to analog converter for sampled signal
 reconstruction
 [NASA-CASE-MSC-12458-1] c08 N73-32081
 Rock sampling --- apparatus for controlling
 particle size
 [NASA-CASE-XNP-10007-1] c46 N74-23068
 Rock sampling --- method for controlling
 particle size distribution

[NASA-CASE-XNP-09755] c46 N74-23069
 Apparatus for microbiological sampling ---
 including automatic swabbing
 [NASA-CASE-LAR-11069-1] c35 N75-12272
 Automatic biowaste sampling
 [NASA-CASE-MSC-14640-1] c54 N76-14804
 Remote water monitoring system
 [NASA-CASE-LAR-11973-1] c43 N77-28563

SANDWICH STRUCTURES

Sandwich panel structure for removing heat from
 shield between hot and cold areas
 [NASA-CASE-XIA-00349] c33 N70-37979
 Particle detector for measuring micrometeoroid
 velocity in space
 [NASA-CASE-XIA-00495] c14 N70-41332
 Capacitor sandwich structure containing metal
 sheets of known thickness for counting
 penetration rates of meteoroids
 [NASA-CASE-XLE-01246] c14 N71-10797
 Technique for making foldable, inflatable,
 plastic honeycomb core panels for use in
 building and bridge structures, light and
 radio wave reflectors, and spacecraft
 [NASA-CASE-XIA-03492] c15 N71-22713
 Punch and die device for forming convolution
 series in thin gage metal hemispheres
 [NASA-CASE-XNP-05297] c15 N71-23811
 Composite sandwich lattice structure
 [NASA-CASE-LAR-11898-1] c24 N77-15103
 Composite sandwich lattice structure
 [NASA-CASE-LAR-11898-2] c24 N77-26242

SAPPHIRE

Bonding of sapphire to sapphire by eutectic
 mixture of aluminum oxide and zirconium oxide
 [NASA-CASE-GSC-11577-1] c37 N75-15992
 Bonding of sapphire to sapphire by eutectic
 mixture of aluminum oxide and zirconium oxide
 [NASA-CASE-GSC-11577-3] c24 N76-15234

SATELLITE ANTENNAS

Monopole antenna system for maximum
 omnidirectional efficiency for use on satellites
 [NASA-CASE-XIA-00414] c07 N70-38200
 Development of antenna system for spin
 stabilized communication satellite for
 simultaneous reception and transmission of data
 [NASA-CASE-IGS-02607] c31 N71-23009

SATELLITE ATTITUDE CONTROL

Photosensitive light source device for detecting
 unmanned spacecraft deviation from reference
 attitude
 [NASA-CASE-XNP-00438] c21 N70-35089
 Attitude control system for spacecraft based on
 conversion of incident solar radiation on
 movable control surfaces into mechanical torques
 [NASA-CASE-XNP-02982] c31 N70-41855
 Design and development of satellite despin device
 [NASA-CASE-XNP-08523] c31 N71-26396
 Utilization of momentum devices for forming
 attitude control and damping system for
 spacecraft
 [NASA-CASE-XIA-02551] c21 N71-21708
 Gravity gradient attitude control system with
 gravity gradiometer and reaction wheels for
 artificial satellite attitude control
 [NASA-CASE-GSC-10555-1] c21 N71-27324
 Method and apparatus for providing active
 attitude control for spacecraft by converting
 any attitude motion of vehicle into simple
 rotational motion
 [NASA-CASE-BQN-10439] c21 N72-21624
 Momentum wheel design for spacecraft attitude
 control and magnetic drum and head system for
 data storage
 [NASA-CASE-NFO-11481] c21 N73-13644
 Combination automatic-starting electrical plasma
 torch and gas shutoff valve --- for satellite
 attitude control
 [NASA-CASE-XLR-10717] c37 N75-29426
 Attitude control system
 [NASA-CASE-MFS-22787-1] c15 N77-10113

SATELLITE CONTROL

Stabilization system for gravity-oriented
 satellites using single damper rod
 [NASA-CASE-XAC-01591] c31 N71-17729

SATELLITE DESIGN

Inflation system for balloon type satellites
 [NASA-CASE-IGS-03351] c31 N71-16081

SATELLITE INSTRUMENTS

Satellite stabilization reaction wheel scanner

- [NASA-CASE-XGS-02629] c14 N71-21082
Economical satellite aided vehicle avoidance
system for preventing midair collisions
[NASA-CASE-ERC-10419] c21 N72-21631
- SATELLITE NETWORKS**
Satellite network synchronization system with
multiple access to multiplex repeater
[NASA-CASE-GSC-10390-1] c07 N72-11149
- SATELLITE ORBITS**
Development of method and apparatus for spinning
satellite about selected axis after reaching
predetermined orientation
[NASA-CASE-BGN-00936] c31 N71-29050
- SATELLITE ORIENTATION**
Sensing method and device for determining
orientation of space vehicle or satellite by
using particle traps
[NASA-CASE-XGS-00466] c21 N70-34297
Spin phase synchronization of cartwheel
satellite in polar orbit
[NASA-CASE-XGS-05579] c31 N71-15676
Development of method and apparatus for spinning
satellite about selected axis after reaching
predetermined orientation
[NASA-CASE-BGN-00936] c31 N71-29050
Analog spatial maneuver computer with three
output angles for obtaining desired spatial
attitude
[NASA-CASE-GSC-10880-1] c08 N72-11172
- SATELLITE PERTURBATION**
Flexible turnstile antenna system for reducing
nutations in spin-oriented satellites
[NASA-CASE-XNF-00442] c31 N71-10747
- SATELLITE ROTATION**
Optical scanner mounted on rotating support
structure with method of compensating for
image or satellite rotation
[NASA-CASE-XGS-02401] c14 N69-27485
Stretch Yc-Yc mechanism for reducing initial
spin rate of space vehicle
[NASA-CASE-XGS-00619] c30 N70-40016
Development of method and apparatus for spinning
satellite about selected axis after reaching
predetermined orientation
[NASA-CASE-BGN-00936] c31 N71-29050
- SATELLITE TELEVISION**
Adaptive signal-generating system and logic
circuits for satellite television systems
[NASA-CASE-GSC-11367] c10 N71-26374
- SATELLITE TRACKING**
Design and development of tracking receiver for
tracking satellites and receiving radio signal
transmissions under adverse noise conditions
[NASA-CASE-XGS-08679] c10 N71-21473
Simultaneous acquisition of tracking data from
two stations
[NASA-CASE-NFO-13292-1] c32 N75-15854
Switchable beamwidth monopulse method and system
[NASA-CASE-GSC-11924-1] c33 N76-27472
- SATELLITE TRANSMISSION**
Asynchronous, multiplexing, single line
transmission and recovery data system --- for
satellite use
[NASA-CASE-NFO-13321-1] c32 N75-26195
- SATELLITE-BORNE PHOTOGRAPHY**
Rotary sclenoid shutter drive assembly and
rotary inertia damper and stop plate assembly
--- for use with cameras mounted in satellites
[NASA-CASE-GSC-11560-1] c33 N74-20861
- SATURATION**
Saturable magnetic core and signal detection for
indicating impending saturation
[NASA-CASE-ERC-10089] c23 N72-17747
- SAWTOOTH WAVEFORMS**
Linear sawtooth voltage wave generator with
transistor timing circuit having capacitor and
zener diode feedback loops
[NASA-CASE-XMS-01155] c09 N70-41675
- SCANNERS**
Electronic and mechanical scanning control
system for monopulse tracking antenna
[NASA-CASE-XGS-05582] c07 N69-27460
Electronic background suppression field scanning
sensor for detecting point source targets
[NASA-CASE-XGS-05211] c07 N69-39980
Electron beam scanning system for improved image
definition and reduced power requirements for
video signal transmission
[NASA-CASE-ERC-10552] c09 N71-12539
- Satellite stabilization reaction wheel scanner
[NASA-CASE-XGS-02629] c14 N71-21082
Monopulse scanning network for scanning
volumetric antenna pattern
[NASA-CASE-GSC-10299-1] c09 N71-24804
High speed scanner for measuring mass of
preselected gases at high sampling rate
[NASA-CASE-LAR-10766-1] c14 N72-21432
Scan oscilloscope for mapping surface
sensitivity of photomultiplier tube
[NASA-CASE-LAR-10320-1] c09 N72-23172
Ultrasonic scanner for radial and flat panels
[NASA-CASE-MFS-20335-1] c35 N74-10415
Apparatus for scanning the surface of a
cylindrical body
[NASA-CASE-NFO-11861-1] c36 N74-20009
Fast scan control for deflection type mass
spectrometers
[NASA-CASE-LAR-11428-1] c35 N74-34857
Magnetometer --- with an automatic scanning
transducer
[NASA-CASE-LAR-11617-2] c35 N77-17430
- SCANNING**
Conversion system for transforming slow scan
rate of Apollo TV camera on moon to fast scan
of commercial TV
[NASA-CASE-XMS-07168] c07 N71-11300
Operation of vidicon tube for scanning spatial
charge density pattern
[NASA-CASE-XNP-06028] c09 N71-23189
Position determination systems --- using orbital
antenna scan of celestial bodies
[NASA-CASE-MSC-12593-1] c17 N76-21250
- SCHLIEREN PHOTOGRAPHY**
Schlieren system employing antiparallel
reflector in the forward direction
[NASA-CASE-ARC-10971-1] c09 N76-26224
- SCHOOLS**
Silent alarm system for multiple room facility or
school
[NASA-CASE-NFO-11307-1] c10 N73-30205
- SCHOTTKY DIODES**
High voltage, high current Schottky barrier
solar cell
[NASA-CASE-NEC-13482-1] c44 N74-30448
Improved backwall cell
[NASA-CASE-LEW-12236-1] c44 N77-17565
Method for fabricating solar cells having
integral collector grids
[NASA-CASE-LEW-12819-1] c44 N77-24593
- SCOOPS**
Aeroflexible wing structure with air scoop for
inflating stiffeners with ram air
[NASA-CASE-XIA-06095] c01 N69-39981
- SCREWS**
Electromechanical control actuator system using
double differential screws
[NASA-CASE-ERC-10022] c15 N71-26635
Adjustable support device with jacket screw for
altering distance between base and supported
member
[NASA-CASE-NFO-10721] c15 N72-27484
- SCRUBBERS**
Developing high pressure gas purification and
filtration system for use in test operations
of space vehicles
[NASA-CASE-MFS-12806] c14 N71-17588
Process for removing sulfur dioxide from gas
streams --- using iron as a catalyst
[NASA-CASE-MSC-16299-1] c45 N77-31668
- SEA ICE**
Laser technique for breaking ice in ship path
[NASA-CASE-LAR-10815-1] c16 N72-22520
- SEALERS**
Design and development of flexible joint for
pressure suits
[NASA-CASE-XMS-09636] c05 N71-12344
Epoxy resin sealing device for electrochemical
cells in high vacuum environments
[NASA-CASE-XGS-02630] c03 N71-22974
Leak resistant bonded elastomeric seal for
secondary electrochemical cells
[NASA-CASE-XGS-02631] c03 N71-23006
Self lubricating fluoride-metal composite
materials for outer space applications

- [NASA-CASE-XLE-08511] c18 N71-23710
Polyimides of ether-linked aryl tetracarboxylic dianhydrides
- [NASA-CASE-MFS-22355-1] c23 N76-15268
Flame-resistant liquid oxygen compatible neoprene rubber composition
- [NASA-CASE-KSC-11020-1] c27 N77-23267
SEALING
Foil seal between parts moving relative to each other
[NASA-CASE-XIF-05130] c15 N69-21362
Sealed electric storage battery with gas manifold interconnecting each cell
[NASA-CASE-IMP-03378] c03 N71-11051
Epoxy resin sealing device for electrochemical cells in high vacuum environments
[NASA-CASE-XGS-02630] c03 N71-22974
Electrode sealing and insulation for fuel cells containing caustic liquid electrolytes using powdered plastic and metal
[NASA-CASE-XMS-01625] c15 N71-23022
Sealing evacuation port and evacuating vacuum container such as space jackets
[NASA-CASE-IMI-03290] c15 N71-23256
Segmented sealing surface in valve seat
[NASA-CASE-NNO-10606] c15 N72-25451
SEALS (STOPPERS)
Spacecraft battery seals
[NASA-CASE-XGS-03864] c15 N69-24320
Flexible inflatable seal for butterfly valves
[NASA-CASE-XIF-00101] c15 N70-33376
Shrink-fit vacuum system gas valve
[NASA-CASE-XGS-00587] c15 N70-35087
Thin walled pressure test vessel using low-melting alloy-filled joint to attach shell to heads
[NASA-CASE-XLE-04677] c15 N71-10577
Fluid seal formed by flexible disk on rotating shaft to retain lubricating oils around shaft
[NASA-CASE-XIF-05130-2] c15 N71-19570
Sealed storage container for channel carriers with mounted miniature electronic components
[NASA-CASE-MFS-20075] c09 N71-26133
Liquid-vapor interface seal design for turbine rotating shafts including helical and molecular pumps and liquid cooling of mercury vapor
[NASA-CASE-IMP-02862-1] c15 N71-26294
Spiral groove seal --- for rotating shaft
[NASA-CASE-XLE-10326-4] c37 N74-15125
Glass-to-metal seals comprising relatively high expansion metals
[NASA-CASE-LEW-10698-1] c37 N74-21063
High speed, self-acting shaft seal --- for use in turbine engines
[NASA-CASE-LEW-11274-1] c37 N75-21631
Circumferential shaft seal
[NASA-CASE-LEW-12119-1] c37 N76-20488
Method of forming shrink-fit compression seal
[NASA-CASE-LAR-11563-1] c37 N77-23482
Gas path seal --- for use with turbine engines
[NASA-CASE-LEW-12131-1] c37 N77-24498
Shaft seal assembly for high speed and high pressure applications
[NASA-CASE-LEW-11873-1] c37 N77-27404
SEAMS (JOINTS)
Sealing apparatus for joining two pieces of frangible materials
[NASA-CASE-XIA-01494] c15 N71-24164
Cold restraint system for pressure suit joints
[NASA-CASE-XMS-09635] c05 N71-24623
Method of making pressure tight seal for super alloy
[NASA-CASE-LPR-10170-1] c37 N74-11301
SEAT BELTS
Shoulder harness and lap belt restraint system
[NASA-CASE-ARC-10519-2] c05 N75-25915
SEATS
A seat cushion to provide realistic acceleration cues for aircraft simulator pilots
[NASA-CASE-LAR-12149-1] c54 N77-31787
SECTIONS
Journal Bearings
[NASA-CASE-LEW-11076-2] c37 N74-32921
SEDIMENTARY ROCKS
In-situ laser retorting of oil shale
[NASA-CASE-LRW-12217-1] c36 N77-18429
SEGMENTS
Fabrication of curved reflector segments for solar mirror
[NASA-CASE-XLE-08917] c15 N71-15597
SEISMIC WAVES
Determining sway of buildings by low frequency device using pendulum
[NASA-CASE-IMP-00479] c14 N70-34794
SELECTORS
Selector mechanism for mechanical separation and discrimination of high velocity molecular particles
[NASA-CASE-XIF-01533] c11 N71-10777
Peak polarity selector for monitoring waveforms
[NASA-CASE-FEC-10010] c10 N71-24862
SELF ALIGNMENT
Electro-optical system for maintaining two-axis alignment during milling operations on large tank-sections
[NASA-CASE-IMP-00908] c14 N70-40238
SELF ERECTING DEVICES
Self-erectable space structures of flexible foam for application in planetary orbits
[NASA-CASE-XIA-00686] c31 N70-34135
Manned space station collapsible for launching and self-erectable in orbit
[NASA-CASE-XIA-00678] c31 N70-34296
Manned space station launched in packaged condition and self erecting in orbit
[NASA-CASE-XIA-00258] c31 N70-38676
Foldable conduit capable of springing back as self erecting structural member
[NASA-CASE-XIF-00620] c32 N70-41579
Antenna design with self erecting mesh reflector
[NASA-CASE-XGS-09190] c31 N71-16102
Self erecting parabolic reflector design for use in space
[NASA-CASE-XMS-03454] c09 N71-20658
SELF LUBRICATING MATERIALS
Self lubricating fluoride-metal composite materials for outer space applications
[NASA-CASE-XLE-08511] c18 N71-23710
Self lubricating gears and other mechanical parts having surface adapted to frictional contact
[NASA-CASE-MFS-14971] c15 N71-24984
SELF LUBRICATION
Bearing material
[NASA-CASE-LEW-11930-2] c24 N76-26282
SELF MANEUVERING UNITS
Hand-held maneuvering unit for propulsion and attitude control of astronauts in zero or reduced gravity environment
[NASA-CASE-XMS-05304] c05 N71-12336
Lightweight propulsion unit for movement of personnel and equipment across lunar surface
[NASA-CASE-MFS-20130] c28 N71-27585
SELF PROPAGATION
Self-generating optical frequency waveguide
[NASA-CASE-BQN-10541-1] c07 N71-26251
SELF SEALING
Modification of one man life raft
[NASA-CASE-LAR-10241-1] c54 N74-14845
SEMICONDUCTOR DEVICES
Fixture for simultaneously supporting several components for electrical testing
[NASA-CASE-IMP-06032] c09 N69-21926
Semiconductor p-n junction on needle apex to provide stress and strain sensor
[NASA-CASE-XIA-04980] c09 N69-27422
Selective gold diffusion on monolithic silicon chips for switching and nonswitching amplifier devices and circuits and linear and digital logic circuits
[NASA-CASE-BEC-10072] c09 N70-11148
Extra-long monostable multivibrator employing bistable semiconductor switch to allow charging of timing circuit
[NASA-CASE-XGS-00381] c09 N70-34819
Method of forming thin window drifted silicon charged particle detector
[NASA-CASE-XLE-00808] c24 N71-10560
Doping silicon material with gadolinium to increase radiation resistance of solar cells
[NASA-CASE-XLE-02792] c26 N71-10607
Separation of semiconductor wafer into chips bounded by scribe lines
[NASA-CASE-BEC-10138] c26 N71-14354
Voltage tunable Gunn effect semiconductor for microwave generation
[NASA-CASE-XIF-07894] c09 N71-18721

- Indicator device for monitoring charge of wet cell battery, using semiconductor light emitter and photodetector
[NASA-CASE-NFO-10194] c03 N71-20407
- Signaling summary alarm circuit with semiconductor switch for faulty contact indications
[NASA-CASE-XLE-03061-1] c10 N71-24798
- Method for temperature compensating semiconductor gages by exposure to high energy radiation
[NASA-CASE-XIA-04555-1] c14 N71-25892
- Development and characteristics of fluid oscillator analog to digital converter with variable frequency controlled by signal passing through conditioning circuit
[NASA-CASE-LEW-10345-1] c10 N71-25899
- Volume displacement transducer for leak detection in hermetically sealed semiconductor devices
[NASA-CASE-FRC-10033] c14 N71-26672
- Inverter drive circuit for semiconductor switch
[NASA-CASE-LEW-10233] c10 N71-27126
- Test chambers with orifice and helium mass spectrometer for detecting leak rate of encapsulated semiconductor devices
[NASA-CASE-FRC-10150] c14 N71-28992
- Semiconductor device manufacture using refractory dielectrics as diffusant masks and interconnection insulating materials
[NASA-CASE-XER-08476-1] c26 N72-17820
- Single crystal film semiconductor devices
[NASA-CASE-FRC-10222] c09 N72-22199
- Development of process for forming insulating layer between two electrical conductor or semiconductor materials
[NASA-CASE-LEW-10489-1] c15 N72-25447
- Multiterminal Gunn-type semiconductor microwave generator for producing stable signals
[NASA-CASE-XER-07895] c26 N72-25679
- Miniature piezoelectric semiconductor transducer with in situ stress coupling
[NASA-CASE-FRC-10087-2] c14 N72-31446
- Development and characteristics of hermetically sealed coaxial package for containing microwave semiconductor components
[NASA-CASE-GSC-10791-1] c15 N73-14469
- Semiconductor projectile impact detector
[NASA-CASE-NFS-23008-1] c35 N76-19405
- Process for fabricating SiC semiconductor devices
[NASA-CASE-LEW-12094-1] c76 N76-25049
- An improved method and apparatus for use in examining the lattice of a semiconductor wafer by X-ray diffraction
[NASA-CASE-NFS-23315-1] c76 N76-32029
- Application of semiconductor diffusants to solar cells by screen printing
[NASA-CASE-LEW-12775-1] c44 N77-24589
- SEMICONDUCTOR JUNCTIONS**
- Gallium arsenide solar cell preparation by surface deposition of cuprous iodide on thin n-type polycrystalline layers and heating in iodine vapor
[NASA-CASE-XNP-01960] c09 N71-23027
- Miniature electromechanical junction transducer operating on piezoelectric effect and utilizing epoxy for stress coupling component
[NASA-CASE-FRC-10087] c14 N71-27334
- Resin for protecting p-n semiconductor junction surface
[NASA-CASE-FRC-10339-1] c18 N73-30532
- SEMICONDUCTORS (MATERIALS)**
- Role mobility of deposited semiconductor films in vacuum utilizing thermal gradient
[NASA-CASE-XKS-04614] c15 N69-21460
- Semiconductor in resonant cavity for improving signal to noise ratio of communication receiver
[NASA-CASE-NSC-12259-1] c07 N70-12616
- Improved semiconductor multivibrator circuit which approaches 100 percent efficiency
[NASA-CASE-XAC-00942] c10 N71-16042
- Fabrication of sintered impurity semiconductor brushes for electrical energy transfer
[NASA-CASE-XMF-01016] c26 N71-17818
- Binding layer of semiconductor particles by electrodeposition
[NASA-CASE-XNP-01959] c26 N71-23043
- Gadolinium or samarium doped-silicon semiconductor material with resistance to radiation damage for use in solar cells
[NASA-CASE-XLE-10715] c26 N71-23292
- Characteristics of infrared photodetectors manufactured from semiconductor material irradiated by electron beam
[NASA-CASE-IAR-10728-1] c14 N73-12445
- Traveling wave solid state amplifier utilizing a semiconductor with negative differential mobility
[NASA-CASE-HQN-10069] c33 N75-27251
- Vapor deposition apparatus --- semiconductors and gallium arsenides
[NASA-CASE-HQN-10462] c25 N75-29192
- Field effect transistor and method of construction thereof
[NASA-CASE-NFS-23312-1] c33 N76-26394
- SENSITIVITY**
- Design of active RC network capable of operating at high Q values with reduced sensitivity to gain amplification and number of passive components
[NASA-CASE-ARC-10042-2] c10 N74-11256
- SENSORS**
- Bonding method in the manufacture of continuous regression rate sensor devices
[NASA-CASE-IAR-10337-1] c24 N75-30260
- Medical subject monitoring systems --- multichannel monitoring systems
[NASA-CASE-HSC-14180-1] c52 N76-14757
- SENSORY PERCEPTION**
- Prosthetic limb with tactile sensing device
[NASA-CASE-NFS-16570-1] c05 N73-32013
- SEPARATED FLOW**
- Thrust vector control by secondary injection of fluid into rocket nozzle flow field to separate exhaust flow
[NASA-CASE-XLE-00208] c28 N70-34294
- Double hinged flap for boundary layer control over trailing edges of wings
[NASA-CASE-XIA-01290] c02 N70-42016
- Separation cell with permeable membranes for fluid mixture component separation
[NASA-CASE-XMS-02952] c18 N71-20742
- Flow separation detector
[NASA-CASE-ARC-11046-1] c35 N76-28535
- SEPARATORS**
- Condenser-separator for dehumidifying air utilizing sintered metal surface
[NASA-CASE-XIA-08645] c15 N69-21465
- Umbilical separator for rockets
[NASA-CASE-XNE-00425] c11 N70-38202
- Liquid-gas separator adapted for use in zero gravity environment - drawings
[NASA-CASE-XMS-01624] c15 N70-40062
- Describing apparatus for separating gas from cryogenic liquid under zero gravity and for venting gas from fuel tank
[NASA-CASE-XIF-00586] c15 N71-15968
- Liquid-gaseous centrifugal separator for weightlessness environment
[NASA-CASE-XLA-00415] c15 N71-16079
- Development of liquid separating system using capillary device connected to flexible bladder storage chamber
[NASA-CASE-XMS-13052] c14 N71-20427
- Vapor-liquid separator design with vapor driven pump for separated liquid pumping for application in propellant transfer
[NASA-CASE-XMF-04042] c15 N71-23023
- Device for removing air from water for use in life support systems in manned space flight
[NASA-CASE-XIA-8914] c15 N73-12492
- Centrifugal lyophobic separator
[NASA-CASE-LAR-10194-1] c34 N74-30608
- Fluid control apparatus and method
[NASA-CASE-LAR-11110-1] c34 N75-26282
- Low gravity phase separator
[NASA-CASE-HSC-14773-1] c31 N75-32262
- Method and apparatus for fluffing, separating, and cleaning fibers
[NASA-CASE-IAR-11224-1] c37 N76-18456
- Flexible formulated plastic separators for alkaline batteries
[NASA-CASE-LEW-12363-1] c44 N76-19552
- Inorganic-organic battery separator for alkaline batteries
[NASA-CASE-LEW-12649-1] c44 N76-31674
- Gels as battery separators for soluble electrode cells

- [NASA-CASE-LEW-12364-1] c44 N77-22606
- SEQUENCING**
- Synchronous counter design incorporating cascaded binary stages driven by previous stages and inputs through NAND gates [NASA-CASE-XGS-02440] c08 N71-19432
- Pulse duration control device for driving slow response time loads in selected sequence including switching and delay circuits and magnetic storage [NASA-CASE-XGS-04224] c10 N71-26418
- Digital function generator for generating any arbitrary single valued function [NASA-CASE-NFO-11104] c08 N72-22165
- MCD 2 sequential function generator for multibit sequence, with two-bit shift register for each pair of bits [NASA-CASE-NFO-10636] c08 N72-25210
- Linear shift register with feedback logic for generating pseudonoise linear recurring binary sequences [NASA-CASE-NFO-11406] c08 N73-12175
- Mechanical sequencer** [NASA-CASE-MSC-19536-1] c37 N77-22482
- SEQUENTIAL ANALYSIS**
- Binary coded sequential acquisition ranging system for distance measurements [NASA-CASE-NFO-11194] c08 N72-25209
- Event sequence detector with several input and shift register responsive to clock pulses [NASA-CASE-NFO-11703-1] c10 N73-32144
- SEQUENTIAL COMPUTERS**
- Digital data reformatter/deserializer [NASA-CASE-NFO-13676-1] c60 N77-24781
- SEQUENTIAL CONTROL**
- Linear three-tap feedback shift register [NASA-CASE-NFO-10351] c08 N71-12503
- Binary sequence detector with few memory elements and minimized logic circuit complexity [NASA-CASE-XNF-05415] c08 N71-12505
- Sequencing device utilizing planetary gear set [NASA-CASE-MSC-19514-1] c37 N77-19459
- SERUMS**
- Reduction of blood serum cholesterol [NASA-CASE-NFO-12119-1] c52 N75-15270
- SERVICE LIFE**
- Service life of electromechanical device for generating sine/cosine functions [NASA-CASE-LAR-10503-1] c09 N72-21248
- SERVOAMPLIFIERS**
- Pneumatic servocamplifier for controlling flow regulator [NASA-CASE-MSC-12121-1] c15 N71-27147
- SERVOCONTROL**
- Electronic and mechanical scanning control system for monopulse tracking antenna [NASA-CASE-XGS-05582] c17 N69-27460
- Proportional controller for regulating aircraft or spacecraft motion about three axes [NASA-CASE-XAC-03392] c03 N70-41954
- Modulating and controlling intensity of light beam from high temperature source by servocontrolled rotating cylinders [NASA-CASE-XMS-04300] c09 N71-19479
- Servocontrol system for measuring local stresses at geometric discontinuity in stressed material [NASA-CASE-XLA-08530] c32 N71-25360
- System to control speed of hydraulically movable members by limiting energy applied to actuators with hydraulic servo loop [NASA-CASE-ARC-10131-1] c15 N71-27754
- Digital servo controller --- for rotating antenna shaft [NASA-CASE-MSC-10769-1] c33 N74-29556
- Digital servo control of random sound test excitation --- in reverberant acoustic chamber [NASA-CASE-NFO-11623-1] c71 N74-31148
- Phase-locked servo system --- for synchronizing the rotation of slip ring assembly [NASA-CASE-MFS-22073-1] c33 N75-13139
- Servo-controlled intravital microscope system [NASA-CASE-NFO-13214-1] c35 N75-25123
- SERVO MECHANISMS**
- Servo system for retroreflector of Michelson interferometer [NASA-CASE-NFO-10300] c14 N71-17662
- Mechanical function generators with potentiometer as sensing element [NASA-CASE-XAC-00001] c15 N71-28952
- Closed loop servosystem for variable speed tape recorders on card spacecraft [NASA-CASE-NFO-10700] c07 N71-33613
- Characteristics of lightweight actuator for imparting linear motion using elongated output shaft [NASA-CASE-NFO-11222] c15 N72-25456
- Development and characteristics of rotary actuator for use on spacecraft to deploy and support pivotal structures such as solar panels [NASA-CASE-NFO-10680] c31 N73-14855
- Method and apparatus for providing a servodrive signal in a high speed stepping interferometer [NASA-CASE-NFO-13569-1] c35 N75-21600
- Simulator for practicing the mating of an observer-controlled object with a target [NASA-CASE-MFS-23052-2] c14 N77-18179
- Hydraulic drain means for servo-systems [NASA-CASE-NFO-10316-1] c37 N77-22479
- Method and apparatus for providing a servo drive signal in a high-speed stepping interferometer [NASA-CASE-NFO-13569-2] c33 N77-28395
- SERVO MOTORS**
- Automatic closed circuit television arc guidance control for welding joints [NASA-CASE-MFS-13046] c07 N71-19433
- Electric motor control system with pulse width modulation for providing automatic null seeking servo [NASA-CASE-XNF-05195] c10 N71-24861
- Development and characteristics of cyclically operable, optical shutter for use as focal plane shutter for transmitting single radiation pulses [NASA-CASE-NFO-10758] c14 N73-14427
- Development and characteristics of rotary actuator for use on spacecraft to deploy and support pivotal structures such as solar panels [NASA-CASE-NFO-10680] c31 N73-14855
- Servo valve [NASA-CASE-LAR-11643-1] c37 N75-13268
- SHAFTS (MACHINE ELEMENTS)**
- Fatigue resistant shear pin with hollow shaft and two plugs [NASA-CASE-XLA-09122] c15 N69-27505
- Elastic universal joint for rocket motor mounting [NASA-CASE-XNF-00416] c15 N70-36947
- Air brake device for absorbing and measuring power from rotating shafts [NASA-CASE-XIE-00720] c14 N70-40201
- Two axis flight controller with potentiometer control shafts directly coupled to rotatable ball members [NASA-CASE-XFB-04104] c03 N70-42073
- Ratchet mechanism for high speed operation at reduced backlash [NASA-CASE-MFS-12805] c15 N71-17805
- Universal joints for connecting two displaced shafts or members [NASA-CASE-NFO-10646] c15 N71-28467
- Development of mating flat surfaces to inhibit leakage of fluid around shafts [NASA-CASE-XLE-10326-2] c15 N72-29488
- Fatigue life of hybrid antifriction bearings at ultrahigh speeds [NASA-CASE-LEW-11152-1] c15 N73-32359
- Spiral groove seal --- for hydraulic rotating shaft [NASA-CASE-LEW-10326-3] c37 N74-10474
- Hole cutter --- drill bits and rotating shaft [NASA-CASE-MFS-22649-1] c37 N75-25186
- Counter pumping debris excluder and separator [NASA-CASE-LEW-11855-1] c37 N76-20487
- Circumferential shaft seal [NASA-CASE-LEW-12119-1] c37 N76-20488
- Adjustable securing base [NASA-CASE-MSC-19666-1] c37 N76-31529
- Non-floating universal joint [NASA-CASE-MSC-19546-1] c37 N77-25536
- Shaft seal assembly for high speed and high pressure applications [NASA-CASE-LEW-11873-1] c37 N77-27404
- Twin-capacitive shaft angle encoder with analog output signal [NASA-CASE-ARC-10897-1] c33 N77-31404
- SHALES**
- In-situ laser rotating of oil shale [NASA-CASE-LEW-12217-1] c36 N77-18429

SHAPED CHARGES

Coupling device for linear shaped charge for space vehicle abort system
[NASA-CASE-XIA-00189] c33 N70-36846

Development of remotely controlled shaped charge for lateral displacement of rocket stages after separation
[NASA-CASE-XIA-04804] c31 N71-23008

SHAPERS

Mandrel for shaping solid propellant rocket fuel into engine casing
[NASA-CASE-XIA-00304] c27 N70-34783

Hand tool for forming dimples and nipples on end portion of tubes
[NASA-CASE-XMS-06876] c15 N71-21536

Dielectric apparatus for heating, fusing, and hardening of organic matrix to form plastic material into shaped product
[NASA-CASE-IAR-10121-1] c15 N71-26721

SHARKS

Conditioning tanned sharkskin for use as abrasive resistant clothing
[NASA-CASE-XMS-09691-1] c18 N71-15545

SHEAR CREEP

Measuring shear-creep compliance of solid and liquid materials used in spacecraft components
[NASA-CASE-XIE-01481] c14 N71-10781

SHEAR FLOW

Shear modulated fluid amplifier of high pressure hydraulic vortex amplifier type
[NASA-CASE-MFS-10412] c12 N71-17578

SHEAR PROPERTIES

Describing instrument capable of measuring true shear viscosity of liquids and viscoelastic materials
[NASA-CASE-XNP-05462] c14 N71-17584

SHEAR STRESS

Fatigue resistant shear pin with hollow shaft and two flugs
[NASA-CASE-XIA-09122] c15 N69-27505

Development of combined velocimeter and accelerometer based on color changes in liquid crystalline material subjected to shear stresses
[NASA-CASE-RFC-10292] c14 N72-25410

Bonded joint and method --- for reducing peak shear stress in adhesive bonds
[NASA-CASE-LAR-10900-1] c37 N74-23064

SHELLS (STRUCTURAL FORMS)

Channel-type shell construction for rocket engines and related configurations
[NASA-CASE-XIE-00144] c28 N70-34860

SHIELDING

Flexible bellows joint shielding sleeve for propellant transfer pipelines
[NASA-CASE-XNP-01655] c15 N71-28937

Shielded flat conductor cable of ribbonlike wires laminates in thin flexible insulation
[NASA-CASE-MFS-13687-2] c09 N72-22198

System for the measurement of ultra-low stray light levels --- light shields and baffles
[NASA-CASE-MFS-23513-1] c74 N77-14842

SHIFT REGISTERS

Binary to binary-coded decimal converter using single set of logic circuits notwithstanding number of shift register decades
[NASA-CASE-XNP-00432] c08 N70-35423

Linear three-tap feedback shift register
[NASA-CASE-NFO-10351] c08 N71-12503

Computer circuit performing both counting and shifting logic operations also capable of miniaturization and integration in basic circuits
[NASA-CASE-XNP-01753] c08 N71-22897

Commutator for steering precisely controlled bidirectional currents through numerous loads by use of magnetic core shift registers
[NASA-CASE-NFO-10743] c08 N72-21199

Multistage feedback shift register with states decomposable into cycles of equal length
[NASA-CASE-NFO-11082] c08 N72-22167

MCD 2 sequential function generator for multibit sequence, with two-bit shift register for each pair of bits
[NASA-CASE-NFO-10636] c08 N72-25210

Linear shift register with feedback logic for generating pseudonoise linear recurring binary sequences
[NASA-CASE-NFO-11406] c08 N73-12175

Family of m-ary linear feedback shift register with binary logic
[NASA-CASE-NFO-11868] c10 N73-20254

Nonrecursive counting digital filter containing shift register
[NASA-CASE-NFO-11821-1] c08 N73-26175

Event sequence detector with several input and shift register responsive to clock pulses
[NASA-CASE-NFO-11703-1] c10 N73-32144

Method and apparatus for decoding compatible convolutional codes
[NASA-CASE-MSC-14070-1] c32 N74-32598

Nonlinear nonsingular feedback shift registers
[NASA-CASE-NFO-13451-1] c33 N76-14373

Selective data segment monitoring system --- using shift registers
[NASA-CASE-ABC-10899-1] c60 N77-19760

Digital data reformatter/deserializer
[NASA-CASE-NFO-13676-1] c60 N77-24781

SHOCK ABSORBERS

Pivotal shock absorbing assembly for use as load distributing portion in landing gear systems of space vehicles
[NASA-CASE-XMF-03856] c31 N70-34159

Energy dissipating shock absorbing system for land payload recovery or vehicle braking
[NASA-CASE-XIA-00754] c15 N70-34850

Shock absorbing couch for body support under high acceleration or deceleration forces
[NASA-CASE-XMS-01240] c05 N70-35152

Low onset rate energy absorber in form of strut assembly for crew couch of Apollo command module
[NASA-CASE-MSC-12279-1] c15 N70-35679

Landing pad assembly for aerospace vehicles
[NASA-CASE-XMF-02853] c31 N70-36654

Spacecraft shock absorbing system for soft landings
[NASA-CASE-XMF-02108] c31 N70-36845

Shock absorber for landing gear of lunar or planetary landing modules
[NASA-CASE-XMF-01045] c15 N70-40354

Shock absorbing articulated multiple couch assembly
[NASA-CASE-MSC-11253] c05 N71-12343

Design and development of double acting shock absorber for spacecraft docking operations
[NASA-CASE-XMS-03722] c15 N71-21530

Impact energy absorber with decreasing absorption rate
[NASA-CASE-XIA-01530] c14 N71-23092

Energy absorbing crew couch strut for Apollo command module
[NASA-CASE-MSC-12279] c15 N72-17450

Shock absorber for use as protective barrier in impact energy absorbing system
[NASA-CASE-NFO-10671] c15 N72-20443

Translatory shock absorber for attitude sensors
[NASA-CASE-MFS-22905-1] c19 N76-22284

An improved vehicular impact absorption system
[NASA-CASE-NFO-14014-1] c37 N77-31501

SHOCK LOADS

Damper system for alleviating air flow shock loads on wind tunnel models
[NASA-CASE-XIA-09480] c11 N71-33612

SHOCK MEASURING INSTRUMENTS

Semiconductor projectile impact detector
[NASA-CASE-MFS-23008-1] c35 N76-19405

SHOCK RESISTANCE

Removable potting compound for instrument shock protection
[NASA-CASE-XIA-00482] c15 N70-36409

Thermal shock resistant hafnia ceramic materials
[NASA-CASE-LAR-10894-1] c18 N73-14584

Thermal shock and erosion resistant tantalum carbide ceramic material
[NASA-CASE-LAR-11902-1] c27 N76-23436

SHOCK TUBES

Knife structure for controlling rupture of shock tube diaphragms
[NASA-CASE-XAC-00731] c11 N71-15960

Design, development, and operation of shock tube with bypass piston tunnel
[NASA-CASE-NFO-12109] c11 N72-22245

Annular arc accelerator shock tube
[NASA-CASE-NFO-13528-1] c09 N77-10071

SHOCK WAVE INTERACTION

Absorptive, nonreflecting barrier mounted between closely spaced jet engines on supersonic aircraft, for preventing shock wave

SUBJECT INDEX

SIGNAL GENERATORS

interference
[NASA-CASE-XLA-02865] c28 N71-15563

SHOCK WAVE LUMINESCENCE
Method and apparatus for measuring shock layer radiation distribution about high velocity objects
[NASA-CASE-XAC-02970] c14 N69-39896

SHOCK WAVE PFCPILES
Method and apparatus for measuring shock layer radiation distribution about high velocity objects
[NASA-CASE-XAC-02970] c14 N69-39896

SHOCK WAVES
Apparatus for mechanically dispersing ultrafine metal powders subjected to shock waves
[NASA-CASE-XLE-04946] c17 N71-24911
Electrical device for developing converging spherical shock waves
[NASA-CASE-NFS-20890] c14 N72-22439
Production of intermetallic compounds by effect of shock waves from explosions and compaction of powder
[NASA-CASE-NFS-20861-1] c18 N73-32437
Shock position sensor for supersonic inlets --- measuring pressure in the throat of a supersonic inlet
[NASA-CASE-LFW-11915-1] c35 N76-14431

SHOES
Jet shoes for space locomotion
[NASA-CASE-XLA-08491] c05 N69-21380

SHORT CIRCUITS
Use of silicon controlled rectifier shorting circuit to protect thermoelectric generator source from thermal destruction
[NASA-CASE-XGS-04808] c03 N69-25146
Vacuum thermionic converter with short-circuited triodes and increased electron transmission and conversion efficiency
[NASA-CASE-XLE-01015] c03 N69-39898
Apparatus for automatically testing analog to digital converters for open and short circuits
[NASA-CASE-XIA-06713] c14 N71-28991

SHOT PEENING
Method of peening and portable peening gun
[NASA-CASE-NFS-23047-1] c37 N76-18454

SHROUDS
Shrouded composite propulsion system configuration
[NASA-CASE-XIA-01043] c28 N71-10780
Two dimensional wedge/translating shroud nozzle
[NASA-CASE-XLR-11919-1] c07 N76-22202

SHUTTERS
High speed shutter --- electrically actuated ribbon loop for shuttering optical or fluid passageways
[NASA-CASE-ARC-10516-1] c70 N74-21300

SIDEBANDS
Phase locked loop with sideband rejecting properties in continuous wave tracking radar
[NASA-CASE-XNP-02723] c07 N70-41680

SIDELobe REDUCTION
Multiple mode horn antenna with radiation pattern of equal beamwidths and suppressed sidelobes
[NASA-CASE-XNP-01057] c07 N71-15907

SIGNAL ANALYSIS
Design and development of signal detection and tracking apparatus
[NASA-CASE-XGS-03502] c10 N71-20852
Method and apparatus for a single channel digital communications system --- synchronization of received PCM signal by digital correlation with reference signal
[NASA-CASE-NFO-11302-2] c32 N74-10132
Differential phase shift keyed signal resolver
[NASA-CASE-MSC-14066-1] c33 N74-27705
Correlation type phase detector --- with time correlation integrator for frequency multiplexed signals
[NASA-CASE-GSC-11744-1] c33 N75-26243
Real time analysis of voiced sounds
[NASA-CASE-NFO-13465-1] c32 N76-31372
Digital plus analog output encoder
[NASA-CASE-GSC-12115-1] c62 N76-31946

SIGNAL ANALYZERS
Monitoring system for signal amplitude ranges over predetermined time interval
[NASA-CASE-XMS-04061-1] c09 N69-39885
Feedback controller for sampling error signals within single control formulation time interval

[NASA-CASE-GSC-10554-1] c08 N71-29033
Development of family of frequency to amplitude converters for frequency analysis of complex input signal waveforms
[NASA-CASE-MSC-12395] c09 N72-25257
Device for performing statistical time-series analysis of complex electrical signal waveforms
[NASA-CASE-MSC-12428-1] c10 N73-25240
Pulse stretcher for narrow pulses
[NASA-CASE-MSC-14130-1] c33 N74-32711
Electronic optical transfer function analyzer
[NASA-CASE-NFS-21672-1] c74 N76-19935
Speech analyzer
[NASA-CASE-GSC-11898-1] c32 N77-30309

SIGNAL DETECTION
Position locating system for remote aircraft using voice communication and digital signals
[NASA-CASE-GSC-10087-2] c21 N71-13958
Saturable magnetic core and signal detection for indicating impending saturation
[NASA-CASE-ERC-10089] c23 N72-17747
Anti-multipath digital signal detector
[NASA-CASE-LAR-11827-1] c32 N77-10392
Hearing aid malfunction detection system
[NASA-CASE-MSC-14916-1] c33 N77-13335
Multiple rate digital command detection system with range clean-up capability
[NASA-CASE-NFO-13753-1] c32 N77-20289

SIGNAL DETECTORS
Roughness detector for recording surface pattern of irregularities
[NASA-CASE-XLA-00203] c14 N70-34161
Electrical testing apparatus for detecting amplitude and width of transient pulse
[NASA-CASE-XMF-06519] c09 N71-12519
System for monitoring presence of neutrals in streams of ions - ion engine control
[NASA-CASE-XNP-02592] c24 N71-20518
Development of apparatus for generating output signal commensurate with information contained in input signal
[NASA-CASE-ERC-10041] c08 N71-29138

SIGNAL DISTORTION
Low distortion receiver for bi-level baseband PCM waveforms
[NASA-CASE-MSC-14557-1] c32 N76-16249

SIGNAL ENCODING
Adaptive compression signal processor for PCM communication systems
[NASA-CASE-XLA-03076] c07 N71-11266

SIGNAL GENERATORS
Plural recorder system which limits signal recording to signals of sufficient interest
[NASA-CASE-XMS-06949] c09 N69-21467
Alternating current signal generator providing plurality of amplitude modulated output signals
[NASA-CASE-XNP-05612] c09 N69-21468
Circuitry for generating sync signals in FM communication systems including video information
[NASA-CASE-XNP-10830] c07 N71-11281
Apparatus for generating microwave signals at progressively related phase angles for driving antenna array
[NASA-CASE-ERC-10046] c10 N71-18722
System generating sidereal frequency signals from signals of standard solar frequency without use of mixing operations or feedback loops
[NASA-CASE-XGS-02610] c14 N71-23174
Hand controller operable about three respectively perpendicular axes and capable of actuating signal generators for attitude control devices
[NASA-CASE-XMS-07487] c15 N71-23255
Voltage controlled oscillators and pulse amplitude modulation for signal ratio system
[NASA-CASE-XNP-04367] c09 N71-23545
Sampling circuit for signal processing in multiplex transmission by Fourier analysis
[NASA-CASE-NFO-10388] c07 N71-24622
Signaling summary alarm circuit with semiconductor switch for faulty contact indications
[NASA-CASE-XLE-03061-1] c10 N71-24798
Adaptive signal generating system and logic circuits for satellite television systems
[NASA-CASE-GSC-11367] c10 N71-26374

- Device for monitoring voltage by generating signal when voltages drop below predetermined value
[NASA-CASE-KSC-10020] c10 N71-27338
- System for control of variable signal generator
[NASA-CASE-NFO-11064] c07 N72-11150
- Digital function generator for generating any arbitrary single valued function
[NASA-CASE-NFO-11104] c08 N72-22165
- Development of Hall effect transducer for converting mechanical shaft rotations into proportional electrical signals
[NASA-CASE-LPR-10620-1] c09 N72-25255
- Multiterminal Gunn-type semiconductor microwave generator for producing stable signals
[NASA-CASE-XER-07895] c26 N72-25679
- Audio frequency analysis circuit for determining, displaying, and recording frequency of sweeping audio frequency signal
[NASA-CASE-NFO-11107] c14 N72-27408
- Digital servo control of random sound test excitation --- in reverberant acoustic chamber
[NASA-CASE-NFO-11623-1] c71 N74-31148
- Signal conditioner test set
[NASA-CASE-KSC-10750-1] c35 N75-12270
- System for generating timing and control signals
[NASA-CASE-NFO-13125-1] c33 N75-19519
- Pseudo-noise test set for communication system evaluation --- test signals
[NASA-CASE-MFS-22671-1] c35 N75-21582
- NDIR gas analyzer based on absorption modulation ratios for known and unknown samples
[NASA-CASE-ARC-10802-1] c35 N75-30502
- Twin-capacitive shaft angle encoder with analog output signal
[NASA-CASE-ARC-10897-1] c33 N77-31404
- SIGNAL MEASUREMENT**
- Traveling wave tube circuit
[NASA-CASE-LFW-12013-1] c33 N77-17360
- SIGNAL MIXING**
- Impedance transformation device for signal mixing
[NASA-CASE-XGS-01110] c07 N69-24334
- SIGNAL PROCESSING**
- Adaptive compression signal processor for PCM communication systems
[NASA-CASE-XIA-03076] c07 N71-11266
- Conversion system for transforming slow scan rate of Apollo TV camera on moon to fast scan rate of commercial TV
[NASA-CASE-XMS-07168] c07 N71-11300
- Difference indicating circuit used in conjunction with device measuring gravitational fields
[NASA-CASE-XNP-08274] c10 N71-13537
- Circuitry for developing autocorrelation function continuously within signal receiving period
[NASA-CASE-XNP-00746] c07 N71-21476
- System generating sidereal frequency signals from signals of standard solar frequency without use of mixing operations or feedback loops
[NASA-CASE-XGS-02610] c14 N71-23174
- Feedback integrating circuit with grounded capacitor for signal processing
[NASA-CASE-XAC-10607] c10 N71-23669
- Sampling circuit for signal processing in multiplex transmission by Fourier analysis
[NASA-CASE-NFO-10388] c07 N71-24622
- Video signal processing system for sampling video brightness levels
[NASA-CASE-NFO-10140] c07 N71-24742
- Monopulse scanning network for scanning volumetric antenna pattern
[NASA-CASE-GSC-10299-1] c09 N71-24804
- Apparatus for filtering input signals
[NASA-CASE-NFO-10198] c09 N71-24806
- Video sync processor with phase locked system
[NASA-CASE-KSC-10002] c10 N71-25865
- Transient video signal tape recorder with expanded playback
[NASA-CASE-ARC-10003-1] c09 N71-25866
- Scanning signal phase and amplitude electronic control device with hybrid T waveguide junction
[NASA-CASE-NFO-10302] c10 N71-26142
- Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide frequency range and minimizing noise effects
[NASA-CASE-XNP-09830] c14 N71-26266
- Development of apparatus for generating output signal commensurate with information contained in input signal
[NASA-CASE-ERC-10041] c08 N71-29138
- Development of electric circuit for production of different pulse width signals
[NASA-CASE-XLA-07788] c09 N71-29139
- Phase shifting circuit for selecting phase of input signal
[NASA-CASE-ARC-10269-1] c10 N72-16172
- Processing system for semiperiodic electrical signals to produce real time contoured display
[NASA-CASE-MSC-13407-1] c10 N72-20225
- Design and characteristics of recording system for selective reprocessing and filtering of data to obtain optimum signal to noise ratios
[NASA-CASE-ERC-10112] c07 N72-21119
- Technique for deriving logarithm of input signal using exponentially varying electric signal inversely
[NASA-CASE-ERC-10267] c09 N72-23173
- Development and characteristics of telemetry system using computer-accessed circuits and remotely controlled from ground station
[NASA-CASE-NFO-11358] c07 N72-25172
- Characteristics of digital data processor using pulse from clock source to derive binary singles to show state of various indicators in processor
[NASA-CASE-GSC-10975-1] c08 N73-13187
- Characteristics of two channel telemetry system with two data rate channels for high and low data rate communication
[NASA-CASE-NFO-11572] c07 N73-16121
- Measurement system for physical quantity represented by or converted to variable frequency signal
[NASA-CASE-MFS-20658-1] c14 N73-30386
- Digital to analog converter for sampled signal reconstruction
[NASA-CASE-MSC-12458-1] c08 N73-32081
- Fluid pressure amplifier and system
[NASA-CASE-LAR-10868-1] c33 N74-11050
- Low level signal limiter
[NASA-CASE-XLE-04791] c32 N74-22096
- Miniature multichannel biotelemetry system
[NASA-CASE-NFO-13065-1] c52 N74-26625
- Apparatus and method for processing Korotkov sounds --- for blood pressure measurement
[NASA-CASE-MSC-13999-1] c52 N74-26626
- Pulse stretcher for narrow pulses
[NASA-CASE-MSC-14130-1] c33 N74-32711
- Continuous Fourier transform method and apparatus --- for the analysis of simultaneous analog signal components
[NASA-CASE-ARC-10466-1] c60 N75-13539
- Signal conditioning circuit apparatus --- with constant input impedance
[NASA-CASE-ARC-10348-1] c33 N75-19518
- Television noise reduction device
[NASA-CASE-MSC-12607-1] c32 N75-21485
- Isolated output system for a class D switching-mode amplifier
[NASA-CASE-MFS-21616-1] c33 N75-30429
- Binary to binary coded decimal converter
[NASA-CASE-GSC-12044-1] c60 N76-13781
- Compact bi-phase pulse coded modulation decoder
[NASA-CASE-KSC-10834-1] c33 N76-14371
- Filtering device --- removing electromagnetic noise from voice communication signals
[NASA-CASE-MFS-22729-1] c32 N76-21366
- System for measuring Reynolds in a turbulently flowing fluid --- signal processing
[NASA-CASE-ARC-10755-2] c34 N76-27517
- Surface roughness measuring system
[NASA-CASE-NFO-13862-1] c32 N77-17325
- Bit error rate measurement above and below hit rate tracking threshold
[NASA-CASE-MSC-12743-1] c32 N77-19290
- Three phase full wave dc motor decoder
[NASA-CASE-GSC-11824-1] c33 N77-26386
- Apparatus for determining thermophysical properties of test specimens
[NASA-CASE-LAR-11883-1] c09 N77-27131
- Quadrature demodulation
[NASA-CASE-GSC-12137-1] c32 N77-27272
- An interleaving device --- for computer logic circuits used in optical data processing
[NASA-CASE-GSC-12111-2] c60 N77-31800

Analog to digital converter for two-dimensional radiant energy array computers
[NASA-CASE-GSC-11839-3] c60 N77-32731

SIGNAL RECEPTION

Radar signal receiver arrangement for extending range and increasing signal to noise ratio
[NASA-CASE-INP-00748] c07 N70-36911

Reflectometer for receiver input impedance match measurement
[NASA-CASE-INP-10843] c07 N71-11267

Diversity receiving system with diversity phase lock
[NASA-CASE-IGS-01222] c10 N71-20841

Design and development of signal detection and tracking apparatus
[NASA-CASE-IGS-03502] c10 N71-20852

Development of optimum pre-detection diversity combining receiving system adapted for use with amplitude modulation, phase modulation, and frequency modulation systems
[NASA-CASE-XGS-00740] c07 N71-23098

Binary data decoding device for use at receiving end of communication channel
[NASA-CASE-NFO-10118] c07 N71-24741

Development of electronic circuit for combining input signals on two separate antennas to form two processed signals
[NASA-CASE-MSC-12205-1] c07 N71-27056

Input signal measurement using liquid crystalline elements
[NASA-CASE-ERC-10275] c26 N72-25680

Filter for third order phase locked loops in signal receivers
[NASA-CASE-NFO-11941-1] c10 N73-27171

Electromechanical actuator for producing mechanical force and/or motion in response to electrical signals
[NASA-CASE-NFO-11738-1] c09 N73-30185

Scan converting video tape recorder
[NASA-CASE-NFO-10166-2] c35 N76-16391

SIGNAL REFLECTION

Reflectometer for receiver input impedance match measurement
[NASA-CASE-INP-10843] c07 N71-11267

SIGNAL STABILIZATION

Linear accelerator frequency control system
[NASA-CASE-IGS-05441] c10 N71-22962

Development of apparatus for generating output signal commensurate with information contained in input signal
[NASA-CASE-ERC-10041] c08 N71-29138

System for interference signal nulling by polarization adjustment
[NASA-CASE-NFO-13140-1] c32 N75-24982

SIGNAL TO NOISE RATIOS

Semiconductor in resonant cavity for improving signal to noise ratio of communication receiver
[NASA-CASE-MSC-12259-1] c07 N70-12616

Radar signal receiver arrangement for extending range and increasing signal to noise ratio
[NASA-CASE-INP-00748] c07 N70-36911

Detector assembly for discriminating first signal with respect to presence or absence of second signal at time of occurrence of first signal
[NASA-CASE-INP-00701] c09 N70-40272

Automatic estimation of signal to noise ratio and other parameters in signal communication systems
[NASA-CASE-INP-05254] c07 N71-20791

Voltage controlled oscillators and pulse amplitude modulation for signal ratio system
[NASA-CASE-INP-04367] c09 N71-23545

Design and characteristics of recording system for selective reprocessing and filtering of data to obtain optimum signal to noise ratios
[NASA-CASE-ERC-10112] c07 N72-21119

Development of idler feedback system to reduce electronic noise problem in two parametric amplifiers
[NASA-CASE-LAR-10253-1] c09 N72-25258

Superconductive resonant cavity for improved signal to noise ratio in communication signal
[NASA-CASE-MSC-12259-2] c07 N72-33146

Signal to noise ratio determination circuit using bandpass limiter
[NASA-CASE-GSC-11239-1] c10 N73-25241

Gated compressor, distortionless signal limiter
[NASA-CASE-NFO-11820-1] c32 N74-19788

SIGNAL TRANSMISSION

Synchronizing apparatus for multi-access satellite time division multiplex system
[NASA-CASE-IGS-05918] c07 N69-39974

Electro-mechanical circuit for converting floating intelligence signal to common electrically grounded intelligence recorder
[NASA-CASE-IAC-00086] c09 N70-33182

Demodulator for simultaneous demodulation of two modulating ac signal carriers close in frequency
[NASA-CASE-INP-01160] c07 N71-11298

Bipolar phase detector and corrector for split phase PCM data signals
[NASA-CASE-XGS-01590] c07 N71-12392

Automatic estimation of signal to noise ratio and other parameters in signal communication systems
[NASA-CASE-INP-05254] c07 N71-20791

Multiplexed communication system design including automatic correction of transmission errors introduced by frequency spectrum shifts
[NASA-CASE-INP-01306] c07 N71-20814

Adaptive notch filter, using modulation techniques for reversed phase noise signal
[NASA-CASE-INP-01892] c10 N71-22986

Pulse generator for synchronizing or resetting electronic signals without requiring separate external source
[NASA-CASE-IGS-03632] c09 N71-23311

Device for locating electrically nonlinear objects and determining distance to object by FM signal transmission
[NASA-CASE-RSC-10108] c14 N73-25461

Television multiplexing system, using single crystal controlled clock for signal synchronization
[NASA-CASE-RSC-10654-1] c07 N73-30115

Controlled oscillator system with a time dependent output frequency
[NASA-CASE-NFO-11962-1] c33 N74-10194

Pulse code modulated signal synchronizer
[NASA-CASE-MSC-12462-1] c32 N74-20809

Pulse code modulated signal synchronizer
[NASA-CASE-MSC-12494-1] c32 N74-20810

Digital transmitter for data bus communications system
[NASA-CASE-MSC-14558-1] c32 N75-21486

Modulator for tone and binary signals --- phase of modulation of tone and binary signals on carrier waves in communication systems
[NASA-CASE-GSC-11743-1] c32 N75-24981

Rotating joint signal coupler
[NASA-CASE-LAR-11264-1] c33 N75-27261

Method and apparatus for background signal reduction in opto-acoustic absorption measurement
[NASA-CASE-NFO-13683-1] c35 N77-14411

Very narrow band width receiver
[NASA-CASE-GSC-12142-1] c32 N77-20299

Automatic transponder --- measurement of the internal delay time of a transponder
[NASA-CASE-GSC-12075-1] c32 N77-31350

SILANES

Preparation of elastomeric diamine silazane polymers
[NASA-CASE-INP-04133] c06 N71-20717

Synthesis of high purity dianilinosilanes
[NASA-CASE-INP-06409] c06 N71-23230

Process for preparing high molecular weight polyaryloxysilanes from lower molecular weight forms
[NASA-CASE-INP-08674] c06 N71-28807

SILICA GEL

Gels as battery separators for soluble electrode cells
[NASA-CASE-LFW-12364-1] c44 N77-22606

SILICATES

Ultraviolet radiation resistant alkali-metal silicate coatings for temperature control of spacecraft
[NASA-CASE-IGS-04119] c18 N69-39974

SILICIDES

Silicide coating process and composition for protection of refractory metals from oxidation
[NASA-CASE-ILR-10910] c18 N71-29040

Fused silicide coatings containing discrete particles for protecting niobium alloys --- used in space shuttle thermal protection systems and turbine engine components

- [NASA-CASE-LEW-11179-1] c27 N76-16229
- SILICON**
- Method of forming thin window drifted silicon charged particle detector
[NASA-CASE-XLF-00808] c24 N71-10560
- Gadolinium or samarium doped-silicon semiconductor material with resistance to radiation damage for use in solar cells
[NASA-CASE-XLF-10715] c26 N71-23292
- Metal pattern bonding technique for cover glass attachment to silicon solar cells for space applications
[NASA-CASE-XLF-08569] c03 N71-23449
- Covered silicon solar cells and method of manufacture --- with polymeric films
[NASA-CASE-LEW-11065-2] c44 N76-14600
- SILICON CARBIDES**
- Deposition method for epitaxial beta SiC films having high degree of crystallographic perfection
[NASA-CASE-ERC-10120] c26 N69-33482
- Producing high purity silicon carbide on carbon base by hydrogen reduction of silicon tetrachloride
[NASA-CASE-XLA-00158] c26 N70-36805
- Device for producing high purity silicon carbide on carbon base by hydrogen reduction of silicon tetrachloride
[NASA-CASE-XLA-02057] c26 N70-40015
- Process for fabricating SiC semiconductor devices
[NASA-CASE-LEW-12094-1] c76 N76-25049
- Production of crystals from molten solutions
[NASA-CASE-NFO-13969-2] c76 N77-30984
- SILICON COMPOUNDS**
- Doping silicon material with gadolinium to increase radiation resistance of solar cells
[NASA-CASE-XLF-02792] c26 N71-10607
- Process for preparing disilanol with in-chain perfluorocalkyl groups
[NASA-CASE-MFS-20979-2] c06 N73-32030
- SILICON CONTROLLED RECTIFIERS**
- Use of silicon controlled rectifier shorting circuit to protect thermoelectric generator source from thermal destruction
[NASA-CASE-XGS-04808] c03 N69-25146
- Silicon controlled rectifier inverter with compensation of transients to avoid false gating
[NASA-CASE-XLA-08507] c09 N69-39984
- Reversible ring counter using cascaded single silicon controlled rectifier stages
[NASA-CASE-XGS-01473] c09 N71-10673
- Silicon controlled rectifier pulse gate amplifier for blocking false gating caused by negative transient voltages
[NASA-CASE-XLA-07497] c09 N71-12514
- SILICON DIOXIDE**
- Intermittent type silica gel adsorption refrigerator for providing temperature control for spacecraft components
[NASA-CASE-XNP-00920] c15 N71-15906
- Nose cone mounted heat resistant antenna comprising plurality of adjacent layers of silica not introducing paths of high thermal conductivity through ablative shield
[NASA-CASE-XMS-04312] c07 N71-22984
- Method and apparatus for stable silicon dioxide layers on silicon grown in silicon nitride ambient
[NASA-CASE-ERC-10073-1] c24 N74-19769
- Silica reusable surface insulation
[NASA-CASE-ARC-10721-1] c27 N76-22376
- Two-component ceramic coating for silica insulation
[NASA-CASE-MSC-14270-1] c27 N76-22377
- SILICON FILMS**
- Deposition method for epitaxial beta SiC films having high degree of crystallographic perfection
[NASA-CASE-ERC-10120] c26 N69-33482
- SILICON JUNCTIONS**
- Improving radiation resistance of silicon semiconductor junctions by doping with lithium
[NASA-CASE-XGS-07801] c09 N71-12513
- SILICON NITRIDES**
- Method and apparatus for stable silicon dioxide layers on silicon grown in silicon nitride ambient
[NASA-CASE-ERC-10073-1] c24 N74-19769
- Silicon nitride coated, plastic covered solar cell
[NASA-CASE-LEW-11496-1] c44 N77-14580
- SILICON OXIDES**
- Three-component ceramic coating for silica insulation
[NASA-CASE-MSC-14270-2] c27 N76-23426
- SILICON POLYMERS**
- Oxygen post-treatment of plastic surfaces coated with plasma polymerized silicon-containing monomers
[NASA-CASE-ABC-10915-2] c27 N77-20256
- SILICON RADIATION DETECTORS**
- Lithium drifted silicon radiation detector with gold rectifying contacts
[NASA-CASE-XLF-10529] c14 N69-23191
- Silicon radiation detecting probe design for in vivo biomedical use
[NASA-CASE-XMS-01177] c05 N71-19440
- SILICON TRANSISTORS**
- Vapor deposition method for forming metallized tungsten contacts on silicon substrates
[NASA-CASE-GSC-10695-1] c09 N72-25259
- Development of method and apparatus for detecting surface ions on silicon diodes and transistors
[NASA-CASE-ERC-10325] c15 N72-25457
- SILICONES RESINS**
- Vacuum pressure molding technique
[NASA-CASE-LAB-10073-1] c37 N76-24575
- SILICONIZING**
- Vapor deposited laminated nitride-silicon coating for corrosion prevention of carbonaceous surfaces
[NASA-CASE-XLA-00284] c15 N71-16075
- SILOXANES**
- Synthesis of siloxane containing epoxy polymers with low dielectric properties
[NASA-CASE-MFS-13994-1] c06 N71-11240
- Method for producing alternating ether-siloxane copolymers with stable properties when exposed to elevated temperatures and UV radiation
[NASA-CASE-XMP-02584] c06 N71-20905
- Synthesis of siloxane containing epoxide and diamine polymers
[NASA-CASE-MFS-13994-2] c06 N72-25148
- Silphenylenesiloxane polymer with in-chain perfluorocalkyl groups
[NASA-CASE-MFS-20979] c06 N72-25151
- Fluid polydimethylsiloxane resin with low outgassing properties in cured state
[NASA-CASE-GSC-11358-1] c06 N73-26100
- SILVER**
- Dry electrode manufacture, using silver powder with cement
[NASA-CASE-ERC-10029-2] c05 N72-25121
- SILVER ALLOYS**
- Brazing alloy composition
[NASA-CASE-XMP-06053] c26 N75-27126
- SILVER CHLORIDES**
- Electrochemically reversible silver-silver chloride electrode for detecting bioelectric potential differences generated by human muscles and organs
[NASA-CASE-XMS-02872] c05 N69-21925
- Silver chloride use in technique for fusion bonding of graphite to silver, glass, ceramics, and certain other metals
[NASA-CASE-XGS-00963] c15 N69-39735
- SILVER COMPOUNDS**
- Description of electrical equipment and system for purification of waste water by producing silver ions for bacterial control
[NASA-CASE-MSC-10960-1] c03 N71-24718
- SILVER ZINC BATTERIES**
- Elimination of two step voltage discharge property of silver zinc batteries by using divalent silver oxide capacity of cell to charge anodes to monovalent silver state
[NASA-CASE-XGS-01674] c03 N71-29129
- SIMULATORS**
- Development of apparatus for simulating zero gravity conditions
[NASA-CASE-MFS-12750] c27 N71-16223
- Phonocardiogram simulator producing electrical voltage waves to control amplitude and duration between simulated sounds
[NASA-CASE-XKS-10804] c05 N71-24606
- Sign wave generation simulator for variable amplitude, frequency, damping, and phase

- pulses for oscilloscope display
[NASA-CASE-NPO-10251] c10 N71-27365
- SINE SERIES**
Service life of electromechanical device for generating sine/cosine functions
[NASA-CASE-LAR-10503-1] c09 N72-21248
Function generators for producing complex vibration mode patterns used to identify vibration mode data
[NASA-CASE-LAR-10310-1] c10 N73-20253
- SINE WAVES**
Sign wave generation simulator for variable amplitude, frequency, damping, and phase pulses for oscilloscope display
[NASA-CASE-NPO-10251] c10 N71-27365
Wideband generator for producing sine wave quadrature and second harmonic of input signal
[NASA-CASE-NPO-11133] c10 N72-20223
Electro-mechanical sine/cosine generator
[NASA-CASE-LAR-11389-1] c33 N77-26387
- SINGLE CRYSTALS**
Producing high purity silicon carbide on carbon base by hydrogen reduction of silicon tetrachloride
[NASA-CASE-XLA-00158] c26 N70-36805
Single crystal film semiconductor devices
[NASA-CASE-ERC-10222] c09 N72-22199
Growth of gallium nitride crystals
[NASA-CASE-LAR-11302-1] c25 N75-13054
Hall effect magnetometer
[NASA-CASE-LEW-11632-2] c35 N75-13213
Vapor phase growth of groups 3-5 compounds by hydrogen chloride transport of the elements
[NASA-CASE-LAR-11144-1] c25 N75-26043
- SINTERING**
Condenser-separator for dehumidifying air utilizing sintered metal surface
[NASA-CASE-XLA-08645] c15 N69-21465
Production of refractory bodies with controlled porosity by pressing and heating mixtures of refractory and inert metal powders
[NASA-CASE-LEW-10393-1] c17 N71-15468
- SIZE (DIMENSIONS)**
Development of apparatus for producing metal powder particles of controlled size
[NASA-CASE-XLE-06461-2] c17 N72-28535
- SIZE DETERMINATION**
Impact measuring technique for determining size of hypervelocity projectiles
[NASA-CASE-LAR-10913] c14 N72-16282
- SIZE SEPARATION**
Method and apparatus for precision sizing and joining of large diameter tubes by bulging or constricting overlapping ends
[NASA-CASE-XMP-05114-2] c15 N71-26148
Device which separates and screens particles of soil samples for vidicon viewing in vacuum and reduced gravity environments
[NASA-CASE-XNP-09770-3] c11 N71-27036
- SIZING (SHAPING)**
Method and apparatus for shaping and joining large diameter metal tubes using magnetomotive forces
[NASA-CASE-XMP-05114] c15 N71-17650
- SIZING SCREENS**
Method for making screen with unlimited fineness of mesh and screen thickness
[NASA-CASE-XLE-00953] c15 N71-15966
Screen particle separator for soil samples
[NASA-CASE-XNP-05770-2] c15 N72-22483
- SKEWNESS**
Tape guidance system for multichannel digital recording system
[NASA-CASE-XNP-09453] c08 N71-19420
Automatic character skew and spacing checking network --- of digital tape drive systems
[NASA-CASE-GSC-11925-1] c33 N76-18353
- SKID LANDINGS**
Nose gear steering system for vehicles with main skids to provide directional stability after loss of aerodynamic control
[NASA-CASE-XLA-01804] c02 N70-34160
- SKIN (ANATOMY)**
Conditioning tanned sharkskin for use as abrasive resistant cladding
[NASA-CASE-XMS-09691-1] c18 N71-15545
Percutaneous connector device
[NASA-CASE-KSC-10849-1] c52 N77-14738
- SKIN (STRUCTURAL MEMBER)**
Development of resilient fastener for attaching skin of aerospace vehicles to permit movement of skin relative to framework
[NASA-CASE-XLA-01027] c31 N71-24035
- SKIN TEMPERATURE (BIOLOGY)**
Thermistor holder for skin temperature measurements
[NASA-CASE-ARC-10855-1] c52 N77-10780
- SKIN TEMPERATURE (NON-BIOLOGICAL)**
Heat flux sensor adapted for mounting on aircraft or spacecraft to measure aerodynamic heat flux inflow to aircraft skin
[NASA-CASE-IFR-03802] c33 N71-23085
- SKIRTS**
Inflatable rocket engine nozzle skirt with transpiration cooling
[NASA-CASE-MFS-20619] c28 N72-11708
- SKY**
Camera arrangement --- for satellite scanning of earth or sky
[NASA-CASE-GSC-12032-2] c35 N76-19408
- SLEEP**
Development of apparatus and method for quantitatively measuring brain activity as automatic indication of sleep state and level of consciousness
[NASA-CASE-HSC-13282-1] c05 N71-24729
- SLEEVES**
Nonreusable energy absorbing device comprising ring member with plurality of recesses, cutting members, and guide member mounted in each recess
[NASA-CASE-XMP-10040] c15 N71-22877
System for enhancing tool-exchange capabilities of a portable wrench
[NASA-CASE-MFS-22283-1] c37 N75-33395
- SLENDER BODIES**
Support techniques for restraint of slender bodies such as launch vehicles
[NASA-CASE-XLA-02704] c11 N69-21540
- SLIDING CONTACT**
Electrical connector pin with wiping action to assure reliable contact
[NASA-CASE-XNP-04238] c09 N69-39734
Development of slip ring assembly with inner and outer peripheral surfaces used as electrical contacts for brushes
[NASA-CASE-XNP-01049] c15 N71-23049
- SLIDING FRICTION**
Bearing material --- composite material with low friction surface for rolling or sliding contact
[NASA-CASE-LEW-11930-1] c24 N76-22309
- SLIP CASTING**
Freeze casting of metal ceramic and refractory compound powders into plastic slips
[NASA-CASE-XLE-00106] c15 N71-16076
- SLITS**
Slit regulated gas journal bearing
[NASA-CASE-XNP-00476] c15 N70-38620
Method of fabricating an object with a thin wall having a precisely shaped slit
[NASA-CASE-LAR-10409-1] c31 N74-21059
- SLOPES**
Penetrometer --- for determining load bearing characteristics of inclined surfaces
[NASA-CASE-NPO-11103-1] c35 N77-27367
- SLOT ANTENNAS**
Planar array circularly polarized antenna with wall slot excitation
[NASA-CASE-NPO-10301] c07 N72-11148
Omnidirectional antenna array with circumferential slots for mounting on cylindrical space vehicle
[NASA-CASE-LAR-10163-1] c09 N72-25247
Circularly polarized antenna with linearly polarized pair of elements
[NASA-CASE-ERC-10214] c09 N72-31235
Turnstile slot antenna
[NASA-CASE-GSC-11428-1] c32 N74-20864
Horn antenna having V-shaped corrugated slots
[NASA-CASE-LAR-11112-1] c32 N76-15330
- SLOTS**
Belleville spring assembly with elastic guides having low hysteresis
[NASA-CASE-XNP-09452] c15 N69-27504
Direct lift control system having flaps with slots adjacent to their leading edge and particularly adapted for lightweight aircraft

- [NASA-CASE-LAR-10249-1] c02 N71-26110
Slotted fine-adjustment support for optical devices
- [NASA-CASE-MFS-20249] c15 N72-11386
SLURRY PROPELLANTS
Apparatus for producing hydrocarbon slurry containing small particles of magnesium for use as jet aircraft fuel
- [NASA-CASE-XLF-00010] c15 N70-33382
SMOKE
Development of method for protecting large and oddly shaped areas from radiant and convective heat
- [NASA-CASE-XNP-01310] c33 N71-28552
Smokestack mounted airfoil
- [NASA-CASE-LAR-11669-1] c34 N76-13419
Stack plume visualization system
- [NASA-CASE-LAR-11675-1] c45 N76-17656
Smoke generator
- [NASA-CASE-ARC-10905-1] c37 N77-13418
SODIUM CHLORIDES
Composition of diffuse reflective coating containing sodium chloride in combination with diol solvent and organic wetting and drying agents
- [NASA-CASE-GSC-11214-1] c06 N73-13128
A reverse osmosis membrane of high urea rejection properties
- [NASA-CASE-ARC-1C980-1] c27 N77-18265
SOFT LANDING
Non-reusable kinetic energy absorber for application in soft landing of space vehicles
- [NASA-CASE-XLE-00810] c15 N70-34861
Spacecraft shock absorbing system for soft landings
- [NASA-CASE-XNP-02108] c31 N70-36845
Payload soft landing system using stowable gas bag
- [NASA-CASE-XLE-09881] c31 N71-16085
SOFT LANDING SPACECRAFT
Pivotal shock absorbing assembly for use as load distributing portion in landing gear systems of space vehicles
- [NASA-CASE-XNP-03856] c31 N70-34159
SOIL MECHANICS
Penetrometer --- for determining load bearing characteristics of inclined surfaces
- [NASA-CASE-NPO-11103-1] c35 N77-27367
SOIL SCIENCE
Auger-type soil penetrometer for burrowing into soil formations
- [NASA-CASE-XNP-05530] c14 N73-32321
Remote sensing of vegetation and soil using microwave ellipsometry
- [NASA-CASE-GSC-11976-1] c43 N76-23671
SOILS
Screen particle separator for soil samples
- [NASA-CASE-XNP-09770-2] c15 N72-22483
Soil burrowing mole apparatus
- [NASA-CASE-XNP-07169] c15 N73-32362
SOLAR ACTIVITY
Radiometric measuring system for solar activity and atmospheric attenuation and emission
- [NASA-CASE-FRC-10276] c14 N73-26432
SOLAR ARRAYS
Deployable cantilever support for deploying solar cell arrays aboard spacecraft and reducing transient loading
- [NASA-CASE-NPO-10883] c31 N72-22874
Electrical interconnection of unilluminated solar cells in solar battery array
- [NASA-CASE-GSC-10344-1] c03 N72-27053
Development of solar energy powered heliostrop assembly to orient solar array toward sun
- [NASA-CASE-GSC-10945-1] c21 N72-31637
Method of making silicon solar cell array --- and mounting on flexible substrate
- [NASA-CASE-LFW-11069-1] c44 N74-14784
A non-tracking solar energy collector system
- [NASA-CASE-NPO-13813-1] c44 N77-19579
A solar array strip and a method for forming the same
- [NASA-CASE-NPO-13652-1] c44 N77-28585
Solar cell shingle
- [NASA-CASE-LFW-12587-1] c44 N77-31601
SOLAR CELLS
Fabricating solar cells with dielectric layers to improve glass fusion
- [NASA-CASE-XGS-04531] c03 N69-24267
Solar radiation direction detector and device for compensating degradation of photocells
- [NASA-CASE-XLA-00183] c14 N70-40239
Attitude control system for spacecraft based on conversion of incident solar radiation on movable control surfaces into mechanical torques
- [NASA-CASE-XNP-02982] c31 N70-41855
Simulating voltage-current characteristic curves of solar cell panel with different operational parameters
- [NASA-CASE-XMS-01554] c10 N71-10578
Doping silicon material with gadolinium to increase radiation resistance of solar cells
- [NASA-CASE-XLE-02792] c26 N71-10607
Modifying existing solar cells for temperature control
- [NASA-CASE-NFO-10109] c03 N71-11049
Solar battery with interconnecting means for plural cells
- [NASA-CASE-XNP-06506] c03 N71-11050
Fabrication methods for matrices of solar cell submodules
- [NASA-CASE-XNP-05821] c03 N71-11056
Metal strip mounting arrangement for solar cell arrays on spacecraft
- [NASA-CASE-XGS-01475] c03 N71-11058
Conductor for connecting parallel cells into submodules in series to form solar cell matrix
- [NASA-CASE-NPO-10821] c03 N71-19545
Space erectable rollup solar array of arcuate solar panels furled on tapered drum for spacecraft storage during launch
- [NASA-CASE-NFO-10188] c03 N71-20273
Electrode connection for n-on-p silicon solar cell
- [NASA-CASE-XLE-04787] c03 N71-20492
Fabrication of solar cell banks for attaching solar cells to base members or substrates
- [NASA-CASE-XNP-00826] c03 N71-20895
Gallium arsenide solar cell preparation by surface deposition of cuprous iodide on thin n-type polycrystalline layers and heating in iodine vapor
- [NASA-CASE-XNP-01960] c09 N71-23027
Gadolinium or samarium doped-silicon semiconductor material with resistance to radiation damage for use in solar cells
- [NASA-CASE-XLE-10715] c26 N71-23292
Maintaining current flow through solar cells with open connection using shunting diode
- [NASA-CASE-XLE-04535] c03 N71-23354
Metal pattern bonding technique for cover glass attachment to silicon solar cells for space applications
- [NASA-CASE-XLE-08569] c03 N71-23449
Addition of group 3 elements to silicon semiconductor material for increased resistance to radiation damage in solar cells
- [NASA-CASE-XLE-02798] c26 N71-23654
Method of attaching cover glass to silicon solar cell without using adhesive
- [NASA-CASE-XLE-08569-2] c03 N71-24681
Method and apparatus for fabricating solar cell panels
- [NASA-CASE-XNP-03413] c03 N71-26726
Development and characteristics of solar cells with phosphors in cover glass to improve response to solar ultraviolet radiation
- [NASA-CASE-ARC-10050] c03 N71-33409
Electrically coupled individually encapsulated solar cell matrix
- [NASA-CASE-NPO-11190] c03 N71-34044
Recovering efficiency of solar cells damaged by environmental radiation through thermal annealing
- [NASA-CASE-XGS-04047-2] c03 N72-11062
Spacecraft solar cell system with switching circuit to provide compensation for environmental changes
- [NASA-CASE-GSC-10669-1] c03 N72-20031
Test method and equipment for identifying faulty cells or connections in solar cell assemblies
- [NASA-CASE-NFO-10401] c03 N72-20033
Electrically connected matrix of discrete solar cell blanks
- [NASA-CASE-NPO-10591] c03 N72-22041
Solar cell panel with light transmitting cover plate
- [NASA-CASE-NFO-10747] c03 N72-22042

- Development of process for constructing protective covers for solar cells
[NASA-CASE-GSC-11514-1] c03 N72-24037
- Apparatus for applying thin glass slides to solar cells
[NASA-CASE-NFO-10575] c03 N72-25019
- Electrical interconnection of unilluminated solar cells in solar battery array
[NASA-CASE-GSC-10344-1] c03 N72-27053
- Rectangular solar cell stacked panels to generate electrical power aboard spacecraft
[NASA-CASE-NFO-11771] c03 N73-20040
- Method of making silicon solar cell array --- and mounting on flexible substrate
[NASA-CASE-LEW-11069-1] c44 N74-14784
- High voltage, high current Schottky barrier solar cell
[NASA-CASE-NFO-13482-1] c44 N74-30448
- Covered silicon solar cells and method of manufacture --- with polymeric films
[NASA-CASE-LEW-11065-2] c44 N76-14600
- Solar cell surface treatment
[NASA-CASE-LEW-11330-1] c44 N76-14612
- Improved low cost substrates for polycrystalline solar cells --- for solar energy conversion
[NASA-CASE-GSC-12022-1] c44 N76-26695
- Fabrication of polycrystalline solar cells on low-cost substrates
[NASA-CASE-GSC-12022-1] c44 N76-28635
- Solar cell grid patterns
[NASA-CASE-NFO-13087-2] c44 N76-31666
- Solar cell surface treatment
[NASA-CASE-LEW-11330-2] c44 N76-33624
- Photovoltaic cell array
[NASA-CASE-MFS-22458-1] c44 N77-10635
- Silicon nitride coated, plastic covered solar cell
[NASA-CASE-LEW-11496-1] c44 N77-14580
- Encapsulated solar cell modules
[NASA-CASE-LEW-12185-1] c44 N77-15490
- Improved backwall cell
[NASA-CASE-LEW-12236-1] c44 N77-17565
- Solar cell assembly --- for use under high intensity illumination
[NASA-CASE-LEW-11549-1] c44 N77-19571
- Method for producing solar energy panels by automation
[NASA-CASE-LEW-12541-1] c44 N77-22615
- Application of semiconductor diffusants to solar cells by screen printing
[NASA-CASE-LEW-12775-1] c44 N77-24589
- Horizontally mounted solar collector
[NASA-CASE-MFS-23349-1] c44 N77-30613
- SOLAR COLLECTORS**
- Expanding and contracting connector strip for solar cell array of Nimbus satellite
[NASA-CASE-IGS-01395] c03 N69-21539
- Concentrator device for controlling direction of solar energy onto energy converters
[NASA-CASE-ILE-01716] c09 N70-40234
- Space erectable rollup solar array of arcuate solar panels furled on tapered drum for spacecraft storage during launch
[NASA-CASE-NFO-10188] c03 N71-20273
- Storage stable, thermally activated foaming compositions for erecting and rigidizing mechanisms of thin sheet solar collectors
[NASA-CASE-LAR-10373-1] c18 N71-26155
- Development and characteristics of solar cells with phosphors in cover glass to improve response to solar ultraviolet radiation
[NASA-CASE-ARC-10050] c03 N71-33409
- Selective coating for solar panels --- energy policy
[NASA-CASE-LEW-12159-1] c44 N76-15603
- Portable, linear-focused solar thermal energy collecting system
[NASA-CASE-NFO-13734-1] c44 N76-26690
- Solar cell collector and method for producing same --- indium alloy coatings
[NASA-CASE-LEW-12552-1] c44 N77-17564
- A non-tracking solar energy collector system
[NASA-CASE-NFO-13813-1] c44 N77-19579
- Mount for continuously orienting a collector dish in a system adapted to perform both diurnal and seasonal solar tracking
[NASA-CASE-MFS-23267-1] c35 N77-20401
- Solar energy collection system
[NASA-CASE-NFO-13579-2] c44 N77-20565
- Low cost solar energy collection system
[NASA-CASE-NFO-13579-3] c44 N77-20566
- Sun tracking solar energy collector
[NASA-CASE-NFO-13921-1] c44 N77-24590
- Method for fabricating solar cells having integral collector grids
[NASA-CASE-LEW-12819-1] c44 N77-24593
- A non-tracking solar energy collector system
[NASA-CASE-NFO-13817-1] c44 N77-28583
- Solar cell shingle
[NASA-CASE-LEW-12587-1] c44 N77-31601
- Aluminum or copper substrate panel for selective absorption of solar energy and the method of producing said panel
[NASA-CASE-MFS-23518-1] c44 N77-31610
- Stainless steel panel for selective absorption of solar energy and the method of producing said panel
[NASA-CASE-MFS-23518-2] c44 N77-31611
- Solar energy collection system
[NASA-CASE-NFO-13810-1] c44 N77-32582
- Three-dimensional tracking solar energy concentrator and method for making same
[NASA-CASE-NFO-13736-1] c44 N77-32583
- SOLAR ENERGY**
- Rectangular solar cell stacked panels to generate electrical power aboard spacecraft
[NASA-CASE-NFO-11771] c03 N73-20040
- Solar energy power system --- using Freon
[NASA-CASE-MFS-21628-1] c44 N75-32581
- Thermostatically controlled non-tracking type solar energy concentrator
[NASA-CASE-NFO-13497-1] c44 N76-14602
- Method for producing solar energy panels by automation
[NASA-CASE-LEW-12541-1] c44 N77-22615
- Aluminum or copper substrate panel for selective absorption of solar energy and the method of producing said panel
[NASA-CASE-MFS-23518-1] c44 N77-31610
- Solar photolysis of water
[NASA-CASE-NFO-13675-1] c44 N77-32580
- Three-dimensional tracking solar energy concentrator and method for making same
[NASA-CASE-NFO-13736-1] c44 N77-32583
- SOLAR ENERGY ABSORBERS**
- Low cost solar energy collection system
[NASA-CASE-NFO-13579-1] c44 N75-28519
- Panel for selectively absorbing solar thermal energy and the method of producing said panel
[NASA-CASE-MFS-22562-1] c44 N76-14595
- Solar energy absorber
[NASA-CASE-MFS-22743-1] c44 N76-22657
- Solar energy trap
[NASA-CASE-MFS-22744-1] c44 N76-24696
- A non-tracking solar energy collector system
[NASA-CASE-NFO-13813-1] c44 N77-19579
- Solar cell shingle
[NASA-CASE-LEW-12587-1] c44 N77-31601
- Stainless steel panel for selective absorption of solar energy and the method of producing said panel
[NASA-CASE-MFS-23518-2] c44 N77-31611
- SOLAR ENERGY CONVERSION**
- Solar energy power system
[NASA-CASE-MFS-21628-2] c44 N76-23675
- Improved low cost substrates for polycrystalline solar cells --- for solar energy conversion
[NASA-CASE-GSC-12022-2] c44 N76-26695
- Improved backwall cell
[NASA-CASE-LEW-12236-1] c44 N77-17565
- Horizontally mounted solar collector
[NASA-CASE-MFS-23349-1] c44 N77-30613
- SOLAR FURNACES**
- Lens assembly for solar furnace or solar simulator
[NASA-CASE-INP-04111] c14 N71-15622
- SOLAR GENERATORS**
- Describing method for vapor deposition of gallium arsenide films to manganese substrates to provide semiconductor devices with low resistance substrates
[NASA-CASE-INP-01328] c26 N71-18064
- SOLAR GRAVITATION**
- Table structure and rotating magnet system simulating gravitational forces on spacecraft and displaying trajectories between Earth, Venus, and Mercury
[NASA-CASE-INP-00708] c14 N70-35394

SOLAR HEATING

Improved solar heating system
[NASA-CASE-LAR-12009-1] c44 N76-32649

SOLAR OBSERVATORIES
Light sensitive control system for automatically opening and closing dome of solar optical telescope
[NASA-CASE-MSC-10966] c14 N71-19568

SOLAR POWDS (HEAT STORAGE)
Solar pond
[NASA-CASE-NFO-13581-2] c44 N77-28584

SOLAR POSITION
Sun angle calculator
[NASA-CASE-MSC-12617-1] c35 N76-29552

SOLAR RADIATION
Space simulator with uniform test region radiation distribution, adapted to simulate Venus solar radiations
[NASA-CASE-XNP-00459] c11 N70-38675
Design and characteristics of device for sensing solar radiation and providing spacecraft attitude control to maintain direction with respect to incident radiation
[NASA-CASE-XNP-05535] c14 N71-23040
Utilization of solar radiation by solar still for converting salt and trackish water into potable water
[NASA-CASE-XMS-04533] c15 N71-23086
Wide angle sun sensor --- consisting of cylinder, insulation and pair of detectors
[NASA-CASE-NFO-13327-1] c35 N75-23910
Particulate and solar radiation stable coating for spacecraft
[NASA-CASE-LAR-10805-2] c34 N77-18382

SOLAR RADIO EMISSION
System generating sidereal frequency signals from signals of standard solar frequency without use of mixing operations or feedback loops
[NASA-CASE-XGS-02610] c14 N71-23174

SOLAR REFLECTORS
Foldable, double concave and parabolic reflector system for solar ray concentration
[NASA-CASE-XLA-04622] c03 N70-41580
Modifying existing solar cells for temperature control
[NASA-CASE-NFO-10109] c03 N71-11049
Fabrication of curved reflector segments for solar mirror
[NASA-CASE-XLF-08917] c15 N71-15597
Thermal pump-compressor for converting solar energy
[NASA-CASE-XLA-00377] c33 N71-17610
Forming mold for polishing and machining curved solar magnesium reflector with reinforcing ribs
[NASA-CASE-XLE-08917-2] c15 N71-24836
Inorganic thermal control and solar reflector coatings
[NASA-CASE-MFS-20011] c18 N72-22566
Low cost solar energy collection system
[NASA-CASE-NFO-13579-1] c44 N75-28519
Solar energy collection system
[NASA-CASE-NFO-13579-2] c44 N77-20565
Low cost solar energy collection system
[NASA-CASE-NFO-13579-3] c44 N77-20566
Lightweight reflector assembly
[NASA-CASE-NFO-13707-1] c74 N77-28933

SOLAR SAILS
Strong thin membrane structure
[NASA-CASE-NFO-14021-1] c27 N77-32313

SOLAR SENSORS
Sensor consisting of photocells mounted on pyramidal base for improved pointing accuracy of planetary trackers
[NASA-CASE-XNP-04180] c07 N69-39736
Spacecraft attitude control system using solar and earth sensors, gyroscopes, and jet actuators
[NASA-CASE-XNP-00465] c21 N70-35395
Sun tracker with rotatable plane-parallel plate and two photocells
[NASA-CASE-XGS-01159] c21 N71-10678
Solar sensor with coarse and fine sensing elements for matching preirradiated cells on degradation rates
[NASA-CASE-XLA-01584] c14 N71-23269
Sun direction detection system
[NASA-CASE-NFO-13722-1] c74 N77-22951
Sun tracking solar energy collector
[NASA-CASE-NFO-13921-1] c44 N77-24590

SOLAR SIMULATORS

Lens assembly for solar furnace or solar simulator
[NASA-CASE-XNP-04111] c14 N71-15622
High powered arc electrodes --- producing solar simulator radiation
[NASA-CASE-XLE-11162-1] c33 N74-12913

SOLDERED JOINTS
Soldering device particularly suited to making high quality wiring joints for aerospace engineering utilizing capillary attraction to regulate flow of solder
[NASA-CASE-XLA-08911] c15 N71-27214

SOLDERING
Hydrazine monoperfluoro alkanoate solder flux leaving corrosion resistant coating, for metals such as copper
[NASA-CASE-XNP-03459-2] c18 N71-15688
Metal soldering with hydrazine monoperfluoro alkanoate for corrosion resistant coatings
[NASA-CASE-XNP-03459] c15 N71-21078
Method of plating copper on aluminum to permit conventional soldering of structural aluminum bodies
[NASA-CASE-XLA-08966-1] c17 N71-25903
Device for resistance soldering electrical leads to solder cups of multiple terminal block
[NASA-CASE-GSC-10913] c15 N72-22491
Development of electrical system for indicating optimum contact between electrode and metal surface to permit improved soldering operation
[NASA-CASE-KSC-10242] c15 N72-23497

SOLDERS
Solder coating process for printed copper circuit protection
[NASA-CASE-XMF-01599] c09 N71-20705
Method for attaching a fused-quartz mirror to a conductive metal substrate
[NASA-CASE-MFS-23405-1] c26 N77-29260

SOLENOID VALVES
Solenoid two-step valve for bipropellant flow rate control to rocket engine
[NASA-CASE-XMS-04890-1] c15 N70-22192
Automatic recording McLeod gage with three electrodes and solenoid valve connection
[NASA-CASE-XLE-03280] c14 N71-23093
Solenoid valve including guide for armature and valve member
[NASA-CASE-GSC-10607-1] c15 N72-20442
Remote fire stack igniter --- with solenoid-controlled valve
[NASA-CASE-MFS-21675-1] c25 N74-33378
Automatically operable self-leveling load table
[NASA-CASE-MFS-22039-1] c09 N75-12968

SOLENOIDS
Water cooled solenoid capable of producing magnetic field intensities up to 100 kilogauss
[NASA-CASE-XNP-01951] c09 N70-41929
Automatic power supply circuit design for driving inductive loads and minimizing power consumption including solenoid example
[NASA-CASE-NFO-10716] c09 N71-24892
Rotary solenoid shutter drive assembly and rotary inertia damper and stop plate assembly --- for use with cameras mounted in satellites
[NASA-CASE-GSC-11560-1] c33 N74-20861
Sprag solenoid brake --- development and operations of electrically controlled brake
[NASA-CASE-MFS-21846-1] c37 N74-26976

SOLID LUBRICANTS
Bonded solid lubricant coatings of calcium fluoride and binder for high temperature stability
[NASA-CASE-XMS-00259] c18 N70-36400
Solid lubricant applied to porous roller bearings prior to use in ultrahigh vacuum
[NASA-CASE-XLE-09527] c15 N71-17688
Preparation of inorganic solid film lubricants with long wear life and stability in aerospace environments
[NASA-CASE-XMF-03988] c15 N71-21403
Development of rolling element bearing for operation in ultrahigh vacuum environment
[NASA-CASE-XLE-09527-2] c15 N71-26189

SOLID PROPELLANT IGNITION
Solid propellant ignition with hypergolic fluid injected to predetermined portions of propellant
[NASA-CASE-XLE-00207] c28 N70-33375
Method for igniting solid propellant rocket motors by injecting hypergolic fluids

- [NASA-CASE-XLF-01988] c27 N71-15634
SOLID PROPELLANT ROCKET ENGINES
 Spherical solid propellant rocket engine design
 [NASA-CASE-XLA-00105] c28 N70-33331
 Mandrel for shaping solid propellant rocket fuel
 into engine casing
 [NASA-CASE-XLA-00304] c27 N70-34783
 Spherical solid propellant rocket engine having
 abrupt burnout
 [NASA-CASE-XHQ-01897] c28 N70-35381
 Grain configuration for solid propellant rocket
 engines
 [NASA-CASE-XGS-03556] c27 N70-35534
 Solid propellant rocket vehicle thrust control
 method and apparatus
 [NASA-CASE-XNP-00217] c28 N70-38181
 Steerable solid propellant rocket motor adapted
 to effect payload orientation as multistage
 rocket stage or reduce velocity as retrorocket
 [NASA-CASE-XNP-00234] c28 N70-38645
 Method of making solid propellant rocket motor
 having reliable high altitude capabilities,
 long shelf life, and capable of firing with
 nozzle closure with foamed plastic permanent
 mandrel
 [NASA-CASE-XLA-04126] c28 N71-26779
 Electrical failure detector in solid rocket
 propellant motor insulation against thermal
 degradation by fuel grain
 [NASA-CASE-XMF-03968] c14 N71-27186
 Solid propellant rocket engine with venting
 system to control effective nozzle throat area
 [NASA-CASE-XNP-03282] c28 N72-20758
 Thin walled nozzle with insulative nonablative
 coating for solid propellant rocket engines
 [NASA-CASE-NPO-11458] c28 N72-23810
 Characteristics of solid propellant rocket
 engine with controlled rate of thrust buildup
 operating in vacuum environment
 [NASA-CASE-NPO-11559] c28 N73-24784
 Space vehicle
 [NASA-CASE-MFS-22734-1] c18 N75-19329
 Solid propellant rocket motor and method of
 making same
 [NASA-CASE-XLA-1349] c20 N77-17143
SOLID PROPELLANTS
 Variable thrust ion engine using thermal
 decomposition of solid cesium compound to
 produce propulsive vapor
 [NASA-CASE-XMF-00923] c28 N70-36802
 Photographic method for measuring viscoelastic
 strain in solid propellants and other materials
 [NASA-CASE-XNP-01153] c32 N71-17645
 Ethylene oxide sterilization and encapsulating
 process for sterile preservation of
 instruments and solid propellants
 [NASA-CASE-XNP-05763] c14 N71-20461
 Chemical process for production of
 polyisobutylene compounds and application as
 solid rocket propellant binder
 [NASA-CASE-NFO-10893] c27 N73-22710
SOLID ROCKET BINDERS
 Liner for hybrid solid propellants to bind
 propellant to rocket motor case
 [NASA-CASE-XNP-09744] c27 N71-16392
SOLID ROCKET PROPELLANTS
 Using ethylene oxide in preparation of
 sterilized solid rocket propellants and
 encapsulating materials
 [NASA-CASE-XNP-01749] c27 N70-41897
 Pressurized gas injection for burning rate
 control of solid propellants
 [NASA-CASE-XLE-03494] c27 N71-21819
 Solid propellant stabilizer containing
 nitroguanidine
 [NASA-CASE-NFO-12000] c27 N72-25699
 Solid propellant containing hydrazinium
 nitroformate oxidizer and polymeric
 hydrocarbon binder
 [NASA-CASE-NPO-12015] c27 N73-16764
 Preparing oxidizer coated metal fuel particles
 [NASA-CASE-NFO-11975-1] c28 N74-33209
 Casting propellant in rocket engine
 [NASA-CASE-LAR-11995-1] c28 N77-10213
 Solid propellant rocket motor and method of
 making same
 [NASA-CASE-XLA-1349] c20 N77-17143
SOLID STATE
 Solid state chemical source for ammonia beam
 masers
 [NASA-CASE-XGS-01504] c16 N70-41578
SOLID STATE DEVICES
 Solid state switching circuit design to increase
 current capacity of low rated relay contacts
 [NASA-CASE-XNP-09228] c09 N69-27500
 Temperature compensated solid state differential
 amplifier with application in
 bioinstrumentation circuits
 [NASA-CASE-XAC-00435] c09 N70-35440
 Solid state device for mapping flux and power in
 nuclear reactor cores
 [NASA-CASE-XLE-00301] c14 N70-36808
 Solid state operational integrator
 [NASA-CASE-NPO-10230] c09 N71-12520
 Microwave power receiving antenna solving heat
 dissipation problems by construction of
 elements as heat pipe devices
 [NASA-CASE-MFS-20333] c09 N71-13486
 Computer circuit performing both counting and
 shifting logic operations also capable of
 miniaturization and integration in basic
 circuits
 [NASA-CASE-XNP-01753] c08 N71-22897
 Solid state television camera system consisting
 of monolithic semiconductor mosaic sensor and
 molecular digital readout systems
 [NASA-CASE-XNP-06092] c07 N71-24612
 Solid state circuit for switching alternating
 current input signal as function of direct
 current gating transistor
 [NASA-CASE-XNP-06505] c10 N71-24799
 Solid state force measuring electromechanical
 transducers made of piezoresistive materials.
 [NASA-CASE-ERC-10088] c26 N71-25490
 Development and characteristics of solid state
 acoustic variable time delay line using direct
 current voltage and radio frequency pulses
 [NASA-CASE-ERC-10032] c10 N71-25900
 Solid state broadband stable power amplifier
 [NASA-CASE-XNP-10854] c10 N71-26331
 Solid state remote circuit selector switching
 circuit
 [NASA-CASE-LEW-10387] c09 N72-22201
 Radio frequency controlled solid state switch
 [NASA-CASE-ARC-10136-1] c09 N72-22202
 Development of thermal to electric power
 conversion system using solid state switches
 of electrical currents to load for Seebeck
 effect compensation
 [NASA-CASE-NFO-11388] c03 N72-23048
 Solid state switch for variable circuit switching
 [NASA-CASE-NFO-10817-1] c08 N73-30135
 Full wave modulator-demodulator amplifier
 apparatus --- for generating rectified output
 signal
 [NASA-CASE-FEC-10072-1] c33 N74-14939
 Traveling wave solid state amplifier utilizing a
 semiconductor with negative differential
 mobility
 [NASA-CASE-HQN-10069] c33 N75-27251
 Dual mode solid state power switch
 [NASA-CASE-MFS-22880-1] c33 N76-31410
 Solid-state current transformer
 [NASA-CASE-MFS-22560-1] c33 N77-14335
SOLID SURFACES
 Dye penetrant and technique for nondestructive
 tests of solid surfaces contacted by liquid
 oxygen
 [NASA-CASE-XNP-02221] c18 N71-27170
SOLUBILITY
 Fireproof potassium silicate coating
 composition, insoluble in water after
 application
 [NASA-CASE-GSC-10072] c18 N71-14014
SOLUTES
 Specific wavelength colorimeter --- for
 measuring given solute concentration in test
 sample
 [NASA-CASE-HSC-14081-1] c35 N74-27860
SONIC BOOMS
 Instrumentation for measurement of aircraft
 noise and sonic boom
 [NASA-CASE-LAR-11173-1] c35 N75-19614
 Instrumentation for measuring aircraft noise and
 sonic boom
 [NASA-CASE-LAR-11476-1] c07 N76-27232
SORBATES
 Apparatus for measuring a sorbate dispersed in a

- fluid stream
[NASA-CASE-ARC-10896-1] c34 N75-32389
- SORET COEFFICIENT**
Method of growing composites of the type exhibiting the Soret effect --- improved structure of eutectic alloy crystals
[NASA-CASE-MFS-22926-1] c24 N77-27187
- SOUND GENERATORS**
Ejectable underwater sound source recovery assembly
[NASA-CASE-LAR-10595-1] c35 N74-16135
- SOUND PRESSURE**
Instrumentation for measurement of aircraft noise and sonic boom
[NASA-CASE-LAR-11173-1] c35 N75-19614
Differential sound level meter
[NASA-CASE-LAR-12106-1] c35 N77-23441
- SOUND TRANSDUCERS**
Method and transducer device for detecting presence of hydrogen gas
[NASA-CASE-XMF-03873] c06 N69-39733
Sensor for detecting and measuring energy, velocity and direction of travel of a cosmic dust particle
[NASA-CASE-GSC-10503-1] c14 N72-20381
- SOUND WAVES**
Piezoelectric transducer for monitoring sound waves of physiological origin
[NASA-CASE-XMS-05365] c14 N71-22993
Material suspension within an acoustically excited resonant chamber --- at near weightless conditions
[NASA-CASE-NFO-13263-1] c12 N75-24774
Acoustic energy shaping
[NASA-CASE-NFO-13802-1] c71 N76-18886
Acoustically swept rotor
[NASA-CASE-ARC-11106-1] c05 N77-31130
- SOUNDING ROCKETS**
Development of attitude control system for sounding rocket stabilization during ballistic phase of flight
[NASA-CASE-IGS-01654] c31 N71-24750
System for deploying and ejecting releasable clamshell fairing sections from spinning sounding rockets
[NASA-CASE-GSC-10590-1] c31 N73-14853
- SPACE CAPSULES**
Assembly for opening flight capsule stabilizing and decelerating flaps with reference to capsule recovery
[NASA-CASE-XMF-00641] c31 N70-36410
Design and configuration of manned space capsule
[NASA-CASE-XLA-01332] c31 N71-15664
Describing assembly for opening stabilizing and decelerating flaps of flight capsules used in space research
[NASA-CASE-XMF-03169] c31 N71-15675
- SPACE COMMUNICATION**
Radio receiver with array of independently steerable antennas for deep space communication
[NASA-CASE-XLA-00901] c07 N71-10775
Design and development of tracking receiver for tracking satellites and receiving radio signal transmissions under adverse noise conditions
[NASA-CASE-IGS-08679] c10 N71-21473
Development of antenna system for spin stabilized communication satellite for simultaneous reception and transmission of data
[NASA-CASE-IGS-02607] c31 N71-23009
Space communication system for compressed data with a concatenated Reed-Solomon-Viterbi coding channel
[NASA-CASE-NFO-13545-1] c32 N77-12240
Redundant BF system for space applications
[NASA-CASE-NFO-13955-1] c32 N77-28358
- SPACE ENVIRONMENT SIMULATION**
Simulating voltage-current characteristic curves of solar cell panel with different operational parameters
[NASA-CASE-XMS-01554] c10 N71-10578
Method and feed system for separating and orienting liquid and vapor phases of liquid propellants in zero gravity environment
[NASA-CASE-XLF-01182] c27 N71-15635
Cable suspension and inclined walkway system for simulating reduced or zero gravity environments
[NASA-CASE-XLA-01787] c11 N71-16028
Space environment simulation system for measuring spacecraft electric field strength in plasma sheath
[NASA-CASE-XLF-02038] c09 N71-16086
Optical characteristics measuring apparatus
[NASA-CASE-XMF-08840] c23 N71-16365
Omnidirectional anisotropic molecular trap, used with vacuum pump to simulate space environments for testing spacecraft components
[NASA-CASE-IGS-00783] c30 N71-17788
Space environmental work simulator with portions of space suit mounted to vacuum chamber wall
[NASA-CASE-XMF-07488] c11 N71-18773
Low and zero gravity simulator for astronaut training
[NASA-CASE-MFS-10555] c11 N71-19494
Self lubricating fluoride-metal composite materials for outer space applications
[NASA-CASE-XLF-08511] c18 N71-23710
Test chamber for determining decomposition and autoignition of materials used in spacecraft under controlled environmental conditions
[NASA-CASE-KSC-10198] c11 N71-28629
Illumination system design for use as sunlight simulator in space environment simulators with multiple light sources reflected to single virtual source
[NASA-CASE-HQN-10781] c23 N71-30292
Pressure regulator for space suit worn underwater to simulate space environment for testing and experimentation
[NASA-CASE-MFS-20332] c05 N72-20097
- SPACE ERECTABLE STRUCTURES**
Self-erectable space structures of flexible foam for application in planetary orbits
[NASA-CASE-XLA-00686] c31 N70-34135
Manned space station collapsible for launching and self-erectable in orbit
[NASA-CASE-XLA-00678] c31 N70-34296
Manned space station launched in packaged condition and self erecting in orbit
[NASA-CASE-XLA-00258] c31 N70-38676
Collapsible, space erectable loop antenna system for space vehicle
[NASA-CASE-XMF-00437] c07 N70-40202
Erectable, inflatable, radio signal reflecting passive communication satellite
[NASA-CASE-XLA-00210] c30 N70-40309
Deployment system for flexible wing with rigid superstructure
[NASA-CASE-XLA-01220] c02 N70-41863
Capillary radiator for carrying heat transfer liquid in planetary spacecraft structures
[NASA-CASE-XLF-03307] c33 N71-14035
Describing apparatus for manufacturing operations in low and zero gravity environments of orbital space flight
[NASA-CASE-MFS-20410] c15 N71-19214
Space erectable rollup solar array of arcuate solar panels furled on tapered drum for spacecraft storage during launch
[NASA-CASE-NFO-10188] c03 N71-20273
Self erecting parabolic reflector design for use in space
[NASA-CASE-XMS-03454] c09 N71-20658
Pneumatic cantilever beams and platform for space erectable structure
[NASA-CASE-XLA-01731] c32 N71-21045
Hydraulic actuator design for space deployment of heat radiators
[NASA-CASE-MSC-11817-1] c15 N71-26611
Space expandable tether device for use as passageway between two docked spacecraft
[NASA-CASE-XMS-10993] c15 N71-28936
Expandable space frames with high expansion to collapse ratio
[NASA-CASE-ERC-10365-1] c31 N73-32749
Apparatus for assembling space structure
[NASA-CASE-MFS-23579-1] c12 N77-31213
- SPACE EXPLORATION**
Self-propelled vehicle with wheel, track laying, and walking capability for exploratory exploration
[NASA-CASE-NFO-11366] c11 N73-26238
- SPACE FLIGHT**
Portable environmental control and life support system for astronaut in and out of spacecraft
[NASA-CASE-XMS-09632-1] c05 N71-11203
Television simulation for aircraft and space flight
[NASA-CASE-XFB-03107] c09 N71-19449

SPACE MAINTENANCE

System for removing and repairing spacecraft control thrusters by use of portable air locks
[NASA-CASE-NFS-20325] c28 N71-27095

SPACE MANUFACTURING

Material suspension within an acoustically excited resonant chamber --- at near weightless conditions
[NASA-CASE-NFO-13263-1] c12 N75-24774
Method for manufacturing mirrors in zero gravity environment
[NASA-CASE-NSC-12611-1] c12 N76-15189

SPACE MISSIONS

Planetary atmospheric investigation using split trajectory dual flyby mode
[NASA-CASE-XPC-08494] c30 N71-15990
Elimination of tracking occultation problems occurring during continuous monitoring of interplanetary missions by using Earth orbiting communications satellite
[NASA-CASE-XPC-06029-1] c31 N71-24813
Design and development of space shuttle system for delivering payload to earth orbit or celestial orbit
[NASA-CASE-NSC-12391] c30 N73-12884

SPACE NAVIGATION

Electrical and electromechanical trigonometric computation assembly and space vehicle guidance system for aligning perpendicular axes of two sets of three-axes coordinate references
[NASA-CASE-XMF-00684] c21 N71-21688
Momentum wheel design for spacecraft attitude control and magnetic drum and head system for data storage
[NASA-CASE-NFO-11481] c21 N73-13644
Method for producing reticles for use in outer space
[NASA-CASE-GSC-11188-2] c21 N73-19630

SPACE ORIENTATION

Sensing method and device for determining orientation of space vehicle or satellite by using particle traps
[NASA-CASE-XGS-00466] c21 N70-34297

SPACE REMEDY

Method and apparatus for connecting two spacecraft with probe of one inserted in rocket engine nozzle of other spacecraft
[NASA-CASE-NFS-11133] c31 N71-16222

SPACE SHUTTLE ORBITERS

Thermal insulation attaching means
[NASA-CASE-NSC-12619-1] c39 N75-21671
Variable dihedral shuttle orbiter
[NASA-CASE-LAR-10706-2] c05 N77-31132

SPACE SHUTTLES

Designing spacecraft for flight into space, atmospheric reentry, and landing at selected sites
[NASA-CASE-XAC-02058] c02 N71-16087
Design and development of space shuttle system for delivering payload to earth orbit or celestial orbit
[NASA-CASE-NSC-12391] c30 N73-12884
Spacecraft configurations and aerodynamic characteristics of space shuttle systems with two reusable stages
[NASA-CASE-NSC-12433] c31 N73-14854
Variable ratio mixed-mode bilateral master-slave control system for shuttle remote manipulator system
[NASA-CASE-NSC-14245-1] c18 N75-27041
Fused silicide coatings containing discrete particles for protecting niobium alloys --- used in space shuttle thermal protection systems and turbine engine components
[NASA-CASE-LFW-11179-1] c27 N76-16229

SPACE SIMULATORS

Space simulator with uniform test region radiation distribution, adapted to simulate Venus solar radiations
[NASA-CASE-XMF-00459] c11 N70-38675
Variable geometry manned orbital vehicle having high aerodynamic efficiency over wide speed range and incorporating auxiliary pivotal wings
[NASA-CASE-XIA-03691] c31 N71-15674
Development of method and equipment for testing heat radiative properties of material under controlled environmental conditions
[NASA-CASE-NFS-20096] c14 N71-30026

SPACE STATIONS

Manned space station launched in packaged condition and self erecting in orbit
[NASA-CASE-XLA-00258] c31 N70-38676
Meteoroid impact position locator aid for manned space station
[NASA-CASE-LAR-10629-1] c35 N75-33367
Multiple in-line docking capability for rotating space stations
[NASA-CASE-NFS-20855-1] c15 N77-10112

SPACE SUITS

Astronaut restraint suit for high acceleration protection
[NASA-CASE-XAC-00405] c05 N70-41819
Space suit with pressure-volume compensator system
[NASA-CASE-XIA-05332] c05 N71-11194
Equipotential space suits utilizing mechanical aids to minimize astronaut energy at bending joints
[NASA-CASE-LAR-10007-1] c05 N71-11195
One piece human garment for use as contamination proof garment
[NASA-CASE-NSC-12206-1] c05 N71-17599
Space environmental work simulator with portions of space suit mounted to vacuum chamber wall
[NASA-CASE-XMF-07488] c11 N71-18773
Space suit body heat exchanger design composed of thermal conductance yarn and liquid coolant loops
[NASA-CASE-XMS-09571] c05 N71-19439
Space suit using nonflexible material with low leakage and providing protection against thermal extremes, physical punctures, and radiation with high mobility articulation
[NASA-CASE-XAC-07043] c05 N71-23161
Sealing evacuation port and evacuating vacuum container such as space jackets
[NASA-CASE-XMF-03290] c15 N71-23256
Structure of fabric layers for micrometeoroid protection garment with capability for eliminating heat shorts for use in manufacturing space suits
[NASA-CASE-NSC-12109] c18 N71-26285
Venting device for pressurized space suit helmet to eliminate vomit expelled by crewmen
[NASA-CASE-XMS-09652-1] c05 N71-26333
Automatic control device for regulating inlet water temperature of liquid cooled spacesuit
[NASA-CASE-NSC-13917-1] c05 N72-15098
Pressure regulator for space suit worn underwater to simulate space environment for testing and experimentation
[NASA-CASE-NFS-20332] c05 N72-20097
Space suit with improved waist and torso movement
[NASA-CASE-ARC-10275-1] c05 N72-22092
Underwater space suit pressure control regulator
[NASA-CASE-NFS-20332-2] c05 N73-25125
Automatic temperature control for liquid cooled space suit
[NASA-CASE-ARC-10599-1] c05 N73-26071
Intra- and extravehicular life support space suite for Apollo astronauts
[NASA-CASE-NSC-12609-1] c05 N73-32012
Non-flammable elastomeric fiber from a fluorinated elastomer and containing an halogenated flame retardant
[NASA-CASE-NSC-14331-1] c27 N76-24405
An improved cooling system for removing metabolic heat from an hermetically sealed spacesuit
[NASA-CASE-ARC-11059-1] c54 N77-14743
Spacesuit mobility joints
[NASA-CASE-ARC-11058-1] c54 N77-15641
Spacesuit torso closure
[NASA-CASE-ARC-11100-1] c54 N77-25784

SPACE VEHICLE CHECKOUT PROGRAM

Hydraulic support apparatus for dynamic testing of space vehicles under near-free flight conditions
[NASA-CASE-XMF-03248] c11 N71-10604
Digital computer system for automatic prelaunch checkout of spacecraft
[NASA-CASE-IRS-08012-2] c31 N71-15566
Developing high pressure gas purification and filtration system for use in test operations of space vehicles
[NASA-CASE-NFS-12806] c14 N71-17588

SPACEBORNE PHOTOGRAPHY

Camera arrangement --- for satellite scanning of

- earth or sky
[NASA-CASE-GSC-12032-2] c35 N76-19408
- SPACECRAFT**
- Metal strip mounting arrangement for solar cell arrays on spacecraft
[NASA-CASE-XGS-01475] c03 N71-11058
- Attitude sensor with scanning mirrors for detecting orientation of space vehicle with respect to planet
[NASA-CASE-XLA-00793] c21 N71-22880
- Negation of magnetic fields produced by thin waferlike circuit elements in space vehicles
[NASA-CASE-XGS-03390] c03 N71-23187
- Low mass ionizing device for use in electric thrust spacecraft engines
[NASA-CASE-XNP-01954] c28 N71-28850
- Vacuum chamber with scale model of rocket engine base area of space vehicle
[NASA-CASE-MFS-20620] c11 N72-27262
- SPACECRAFT ANTENNAS**
- Low loss parasitic probe antenna for prelaunch tests of spacecraft antennas
[NASA-CASE-XKS-09348] c09 N71-13521
- Millimeter wave antenna system for spacecraft use
[NASA-CASE-GSC-10949-1] c07 N71-28965
- Low weight, integrated thermoelectric generator/antenna combination for spacecraft
[NASA-CASE-XER-09521] c09 N72-12136
- Omnidirectional antenna array with circumferential slots for mounting on cylindrical space vehicle
[NASA-CASE-LAR-10163-1] c09 N72-25247
- Furlable antenna for spacecraft
[NASA-CASE-NFO-11361] c07 N72-32169
- Collapsible support for antenna reflector applied to installation of spacecraft antennas
[NASA-CASE-NFO-11751] c07 N73-24176
- SPACECRAFT CABIN ATMOSPHERES**
- Thermal control wall panel with application to spacecraft cabins
[NASA-CASE-XLA-01243] c33 N71-22792
- Nonflammable coating compositions --- for use in high oxygen environments
[NASA-CASE-MFS-20486-2] c27 N74-17283
- Regenerable device for scrubbing breathable air of CO₂ and moisture without special heat exchanger equipment
[NASA-CASE-MSC-14771-1] c54 N77-32722
- SPACECRAFT COMMUNICATION**
- Synchronizing apparatus for multi-access satellite time division multiplex system
[NASA-CASE-XGS-05918] c07 N69-39974
- Phase shift data transmission system with pseudo-noise synchronization code modulated with digital data into single channel for spacecraft communication
[NASA-CASE-XNP-00911] c08 N70-41961
- Design and development of tracking receiver for tracking satellites and receiving radio signal transmissions under adverse noise conditions
[NASA-CASE-XGS-08679] c10 N71-21473
- Microwave omnidirectional antenna for use on spacecraft
[NASA-CASE-XLA-03114] c09 N71-22888
- VHF/UHF parasitic probe antenna for spacecraft communication
[NASA-CASE-XKS-09340] c07 N71-24614
- System designed to reduce time required for obtaining synchronization in data communication with spacecraft utilizing pseudonoise codes
[NASA-CASE-NFO-10214] c10 N71-26577
- Turnstile slot antenna
[NASA-CASE-GSC-11428-1] c32 N74-20864
- Switchable bandwidth monopulse method and system
[NASA-CASE-GSC-11924-1] c33 N76-27472
- SPACECRAFT COMPONENTS**
- Rectangular electric conductors for conductor cables to withstand spacecraft vibration and controlled atmosphere
[NASA-CASE-MFS-14741] c09 N70-20737
- Vibration damping system operating in low vacuum environment for spacecraft mechanisms
[NASA-CASE-XMS-01620] c23 N71-15673
- Intermittent type silica gel adsorption refrigerator for providing temperature control for spacecraft components
[NASA-CASE-XNP-00920] c15 N71-15906
- Omnidirectional anisotropic molecular trap, used with vacuum pump to simulate space environments for testing spacecraft components
[NASA-CASE-XGS-00783] c30 N71-17788
- Spacecraft air lock system to provide ingress and egress of astronaut without subjecting vehicular environment to vacuum of space
[NASA-CASE-XLA-02050] c31 N71-22968
- Development and characteristics of docking structure and apparatus for spacecraft docking
[NASA-CASE-XNP-05941] c31 N71-23912
- Design and development of release mechanism for spacecraft components, releasable despin weights, and extensible gravity booms
[NASA-CASE-XGS-08718] c15 N71-24600
- Space environment simulator for testing spacecraft components under aerospace conditions
[NASA-CASE-NFO-10141] c11 N71-24964
- Design and development of spacecraft with outer shell structure heat shielding and built-in, removable excursion module
[NASA-CASE-MSC-13047-1] c31 N71-25434
- Electronic detection system for peak acceleration limits in vibrational testing of spacecraft components
[NASA-CASE-NFO-10556] c14 N71-27185
- Development of solid state polymer coating for obtaining thermal balance in spacecraft components
[NASA-CASE-XLA-01745] c33 N71-28903
- Development of apparatus for mounting scientific experiments in spacecraft to permit utilization without maneuvering spacecraft
[NASA-CASE-MSC-12372-1] c31 N72-25842
- Airlock
[NASA-CASE-MFS-20922-1] c18 N74-22136
- Thrust-isolating mounting --- characteristics of support for loads mounted in spacecraft
[NASA-CASE-MFS-21680-1] c18 N74-27397
- Variable ratio mixed-mode bilateral master-slave control system for shuttle remote manipulator system
[NASA-CASE-MSC-14245-1] c18 N75-27041
- SPACECRAFT CONFIGURATIONS**
- Inflatable honeycomb panel element for lightweight structures usable in space stations and other construction
[NASA-CASE-XLA-00204] c32 N70-36536
- Lenticular vehicle with foldable aerodynamic control flaps and reaction jets for operation above and within earth's atmosphere
[NASA-CASE-XGS-00260] c31 N70-37924
- Stage separation system for spinning vehicles and payloads
[NASA-CASE-XLA-02132] c31 N71-10582
- Spacecraft configurations and aerodynamic characteristics of space shuttle systems with two reusable stages
[NASA-CASE-MSC-12433] c31 N73-14854
- Space vehicle
[NASA-CASE-MFS-22734-1] c18 N75-19329
- Variable dihedral shuttle orbiter
[NASA-CASE-LAR-10706-2] c05 N77-31132
- SPACECRAFT CONSTRUCTION MATERIALS**
- Pressurized cell micrometeoroid detector
[NASA-CASE-XLA-00936] c14 N71-14996
- Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
[NASA-CASE-XNP-08881] c17 N71-28747
- Method of producing complex aluminum alloy parts of high temper, and products thereof
[NASA-CASE-MSC-19693-1] c26 N76-29401
- SPACECRAFT CONTROL**
- Light sensitive digital aspect sensor for attitude control of earth satellites or space probes
[NASA-CASE-XGS-00359] c14 N70-34158
- Spacecraft attitude control system using solar and earth sensors, gyroscopes, and jet actuators
[NASA-CASE-XNP-00465] c21 N70-35395
- Multiple parachute system for landing control of Apollo type spacecraft
[NASA-CASE-XLA-00898] c02 N70-36804
- Attitude control device for space vehicles
[NASA-CASE-XNP-00294] c21 N70-36938
- Attitude orientation control of spin stabilized final stage space vehicles, using horizon

- scanners
[NASA-CASE-XIA-00281] c21 N70-36943
- Aerodynamic configuration of reentry vehicle
heat shield to provide longitudinal and
directional stability at hypersonic velocities
[NASA-CASE-XMS-04142] c31 N70-41631
- Star sensor system for roll attitude control of
spacecraft
[NASA-CASE-XNP-01307] c21 N70-41856
- Photomultiplier detector of Canopus for
spacecraft attitude control
[NASA-CASE-XNP-03914] c21 N71-10771
- Development of spacecraft experiment pointing
and attitude control system
[NASA-CASE-XLA-05464] c21 N71-14132
- Development of attitude control system for
spacecraft orientation
[NASA-CASE-XGS-04393] c21 N71-14159
- Drive mechanism for operating reactance attitude
control system for aerospace bodies
[NASA-CASE-XNP-01598] c21 N71-15583
- Attitude detection system using stellar
references for three-axis control and spin
stabilized spacecraft
[NASA-CASE-XGS-03431] c21 N71-15642
- Large amplitude, linear inertial reference
system of vibrating string type for spacecraft
reference plane
[NASA-CASE-XAC-03107] c23 N71-16098
- Construction and method of arranging plurality
of ion engines to form cluster thereby
increasing efficiency and control by
decreasing heat radiated to space
[NASA-CASE-XNP-02923] c28 N71-23081
- Ion beam deflector system for electronic thrust
vector control for ion propulsion yaw, pitch,
and roll forces
[NASA-CASE-LW-10689-1] c28 N71-26173
- Heated porous plug microthruster for spacecraft
reaction jet controlled systems such as fuel
flow regulation, propellant disassociation,
and heat transfer augmentation
[NASA-CASE-GSC-10640-1] c28 N72-18766
- Development of thrust control system for
application to control of aircraft and
spacecraft
[NASA-CASE-MSC-13397-1] c21 N72-25595
- All sky pointing attitude control system
[NASA-CASE-ARC-10716-1] c35 N77-20399
- SPACECRAFT DESIGN**
- Lunar landing flight research vehicle
[NASA-CASE-XFR-00929] c31 N70-34966
- Design and configuration of manned space capsule
[NASA-CASE-XIA-01332] c31 N71-15664
- Development of spacecraft radiator cover
[NASA-CASE-MSC-12049] c31 N71-16080
- Method and apparatus for connecting two
spacecraft with probe of one inserted in
rocket engine nozzle of other spacecraft
[NASA-CASE-MFS-11133] c31 N71-16222
- Development and characteristics of protective
coatings for spacecraft
[NASA-CASE-XNP-02507] c31 N71-17679
- Development and characteristics of self
supporting space vehicle
[NASA-CASE-XIA-00117] c31 N71-17680
- Multi-mission space vehicle module stage design
[NASA-CASE-XNP-01543] c31 N71-17730
- Development and characteristics of docking
structure and apparatus for spacecraft docking
[NASA-CASE-XNP-05941] c31 N71-23912
- Design and development of spacecraft with outer
shell structure heat shielding and built-in,
removable excursion module
[NASA-CASE-MSC-13047-1] c31 N71-25434
- Spacecraft design with single point aerodynamic
and hydrodynamic stability for emergency
transport of men from space station to
splashdown
[NASA-CASE-MSC-13281] c31 N72-18859
- Space vehicle
[NASA-CASE-MFS-22734-1] c18 N75-19329
- Space vehicle system
[NASA-CASE-MSC-12561-1] c18 N76-17185
- Method and apparatus for neutralizing potentials
induced on spacecraft surfaces
[NASA-CASE-GSC-11963-1] c33 N77-10429
- SPACECRAFT DOCKING**
- Probe and drogue assembly for mechanical linking
of two space vehicles
[NASA-CASE-XMS-03613] c31 N71-16346
- Development and characteristics of docking
structure and apparatus for spacecraft docking
[NASA-CASE-XNP-05941] c31 N71-23912
- Latch for fastening spacecraft docking rings
[NASA-CASE-MSC-15474-1] c15 N71-26162
- High energy absorption docking system design for
docking large spacecraft
[NASA-CASE-MFS-20863] c31 N73-26876
- Latch mechanism
[NASA-CASE-MSC-12549-1] c37 N74-27903
- Spacecraft docking and alignment system ---
using television camera system
[NASA-CASE-MSC-12559-1] c18 N76-14186
- Multiple in-line docking capability for rotating
space stations
[NASA-CASE-MFS-20855-1] c15 N77-10112
- Combined docking and grasping device
[NASA-CASE-MFS-23088-1] c37 N77-23483
- SPACECRAFT ELECTRONIC EQUIPMENT**
- Equipment for testing of ground station ranging
equipment and spacecraft transponders
[NASA-CASE-XMS-05454-1] c07 N71-12391
- Describing apparatus used in vacuum deposition
of thin film inductive windings for spacecraft
microcircuitry
[NASA-CASE-XNP-01667] c15 N71-17647
- Nose cone mounted heat resistant antenna
comprising plurality of adjacent layers of
silica not introducing paths of high thermal
conductivity through ablative shield
[NASA-CASE-XMS-04312] c07 N71-22984
- SPACECRAFT ENVIRONMENTS**
- Portable environmental control and life support
system for astronaut in and out of spacecraft
[NASA-CASE-XMS-09632-1] c05 N71-11203
- Quick disconnect latch and handle combination
for mounting articles on walls or supporting
bases in spacecraft under zero gravity
conditions
[NASA-CASE-MFS-11132] c15 N71-17649
- Dual solid cryogenics for spacecraft refrigeration
insuring low temperature cooling for extended
periods
[NASA-CASE-GSC-10188-1] c23 N71-24725
- Dual stage check valve for cryogenic supply
systems used in space flight environmental
control system
[NASA-CASE-MSC-13587-1] c15 N73-30459
- Metering gun for dispensing precisely measured
charges of fluid
[NASA-CASE-MFS-21163-1] c54 N74-17853
- Zero gravity separator
[NASA-CASE-LAR-10344-1] c35 N76-33470
- SPACECRAFT GUIDANCE**
- Automatic ejection valve for attitude control
and midcourse guidance of space vehicles
[NASA-CASE-XNP-00676] c15 N70-38996
- Electrical and electromechanical trigonometric
computation assembly and space vehicle
guidance system for aligning perpendicular
axes of two sets of three-axes coordinate
references
[NASA-CASE-XNP-00684] c21 N71-21688
- Design and characteristics of device for sensing
solar radiation and providing spacecraft
attitude control to maintain direction with
respect to incident radiation
[NASA-CASE-XNP-05535] c14 N71-23040
- Inertial global alignment system for spacecraft
guidance
[NASA-CASE-XNP-01669] c21 N71-23289
- Hermetically sealed vibration damper design for
use in global assembly of spacecraft inertial
guidance system
[NASA-CASE-MSC-10959] c15 N71-26243
- SPACECRAFT INSTRUMENTS**
- Mechanical coordinate converter for use with
spacecraft tracking antennas
[NASA-CASE-XNP-00614] c14 N70-36907
- Air bearings for spacecraft gyros
[NASA-CASE-XNP-00339] c15 N70-39896
- Unfolding boom assembly with knuckle joints for
positioning equipment for spacecraft
[NASA-CASE-XGS-00938] c32 N70-41367
- Pressurized cell micrometeoroid detector
[NASA-CASE-XLA-00936] c14 N71-14996

- Guidance analyzer having suspended spacecraft
simulating sphere for astronavigation
[NASA-CASE-XNP-09572] c14 N71-15621
- Inertial component clamping assembly design for
spacecraft guidance and control system mounting
[NASA-CASE-XMS-02184] c15 N71-20813
- Optical projector system for establishing
optimum arrangement of instrument displays in
aircraft, spacecraft, other vehicles, and
industrial instrument consoles
[NASA-CASE-XNP-03853] c23 N71-21882
- Combined optical attitude and altitude
indicating instrument for use in aircraft or
spacecraft
[NASA-CASE-XLA-01907] c14 N71-23268
- Spacecraft transponder and ground station radar
system for mapping planetary surfaces
[NASA-CASE-NPO-11001] c07 N72-21118
- Method and apparatus for providing active
attitude control for spacecraft by converting
any attitude motion of vehicle into simple
rotational motion
[NASA-CASE-BQN-10439] c21 N72-21624
- Design and development of thermomechanical pump
for transmitting varying fluid through fluid
circuit to control temperature of spacecraft
instrumentation
[NASA-CASE-NPO-11417] c15 N73-24513
- Deployable pressurized cell structure for a
micrometeoroid detector
[NASA-CASE-LAR-10295-1] c35 N74-21062
- SPACECRAFT LANDING**
- Non-reusable kinetic energy absorber for
application in soft landing of space vehicles
[NASA-CASE-XLE-00810] c15 N70-34861
- Plastic foam generator for space vehicle
instrument payload package flotation in water
landing
[NASA-CASE-XLA-00838] c03 N70-36778
- Device for use in descending spacecraft as
altitude sensor for actuating deceleration
retro-rockets
[NASA-CASE-XMS-03792] c14 N70-41812
- SPACECRAFT LAUNCHING**
- Three stage motion restraining mechanism for
restraining and damping three dimensional
vibrational movement of gimbaled package
during launch of spacecraft
[NASA-CASE-GSC-10306-1] c15 N71-24694
- Development and characteristics of squib
actuated explosive disconnect for spacecraft
release from launch vehicle
[NASA-CASE-NPO-11330] c33 N73-26958
- SPACECRAFT MODELS**
- Space environment simulation system for
measuring spacecraft electric field strength
in plasma sheath
[NASA-CASE-XLE-02038] c09 N71-16086
- SPACECRAFT MODULES**
- Radial module manned space station with
artificial gravity environment
[NASA-CASE-XMS-01906] c31 N70-41373
- Multi-mission space vehicle module stage design
[NASA-CASE-XNP-01543] c31 N71-17730
- Design and development of spacecraft with outer
shell structure heat shielding and built-in,
removable excursion module
[NASA-CASE-HSC-13047-1] c31 N71-25434
- Development and characteristics of thermal
control system for maintaining constant
temperature within spacecraft module with wide
variations of component heat transfer
[NASA-CASE-GSC-11018-1] c31 N73-30829
- SPACECRAFT POSITION INDICATORS**
- Device for determining relative angular position
of spacecraft and radiating celestial body
[NASA-CASE-GSC-11444-1] c14 N73-28490
- Spacecraft attitude sensing system design with
narrow field of view sensor rotating about
spacecraft x-y axis
[NASA-CASE-GSC-10890-1] c21 N73-30640
- SPACECRAFT POWER SUPPLIES**
- Spacecraft battery seals
[NASA-CASE-XGS-03864] c15 N69-24320
- Electrical power system for space flight
vehicles operating over extended periods
[NASA-CASE-XNP-00517] c03 N70-34757
- Lightweight, rugged, inexpensive satellite
battery for producing electrical power from
ionosphere using electrodes with different
contact potentials
[NASA-CASE-XGS-01593] c03 N70-35408
- Design and development of electric generator for
space power system
[NASA-CASE-XLE-04250] c09 N71-20446
- Monostable multivibrator for conserving power in
spacecraft systems
[NASA-CASE-GSC-10082-1] c10 N72-20221
- Rectangular solar cell stacked panels to
generate electrical power aboard spacecraft
[NASA-CASE-NPO-11771] c03 N73-20040
- Thermoelectric power system --- for spacecraft
[NASA-CASE-NFS-22002-1] c44 N76-16612
- Solar energy power system
[NASA-CASE-NFS-21628-2] c44 N76-23675
- SPACECRAFT PROPULSION**
- Colloidal particle generator for electrostatic
engine for propelling space vehicles
[NASA-CASE-XLE-00817] c28 N70-33265
- Spacecraft trajectory correction propulsion system
[NASA-CASE-XNP-01104] c28 N70-39931
- Permanently magnetized ion engine casing
construction for use in spacecraft propulsion
systems
[NASA-CASE-XNP-06942] c28 N71-23293
- Development of voice operated controller for
controlling reaction jets of spacecraft
[NASA-CASE-XLA-04063] c31 N71-33160
- SPACECRAFT RECOVERY**
- Assembly for opening flight capsule stabilizing
and decelerating flaps with reference to
capsule recovery
[NASA-CASE-XNP-00641] c31 N70-36410
- Method for deployment of flexible wing glider
from space vehicle with minimum impact and
loading
[NASA-CASE-XMS-00907] c02 N70-41630
- SPACECRAFT REENTRY**
- Manned space capsule configuration for orbital
flight and atmospheric reentry
[NASA-CASE-XLA-00149] c31 N70-37938
- Event recorder with constant speed motor which
rotates recording disk
[NASA-CASE-XLA-01832] c14 N71-21006
- SPACECRAFT SHIELDING**
- Development and characteristics of protective
coatings for spacecraft
[NASA-CASE-XNP-02507] c31 N71-17679
- Double-wall isothermal cylinder containing heat
transfer fluid thermal reservoir as spacecraft
insulation cover
[NASA-CASE-NFS-20355] c33 N71-25353
- Binder stabilized zinc oxide pigmented coating
for spacecraft thermal control
[NASA-CASE-XNP-07770-2] c18 N71-26772
- Thermal insulation protection means
[NASA-CASE-HSC-12737-1] c34 N77-22423
- SPACECRAFT STABILITY**
- Satellite stabilization reaction wheel scanner
[NASA-CASE-XGS-02629] c14 N71-21082
- Attitude sensor
[NASA-CASE-LAR-10586-1] c19 N74-15089
- Annular momentum control device used for
stabilization of space vehicles and the like
[NASA-CASE-LAR-11051-1] c15 N76-14158
- SPACECRAFT STRUCTURES**
- Collapsible, space erectable loop antenna system
for space vehicle
[NASA-CASE-XNP-00437] c07 N70-40202
- Electro-optical system for maintaining two-axis
alignment during milling operations on large
tank-sections
[NASA-CASE-XNP-00908] c14 N70-40238
- Development of spacecraft radiator cover
[NASA-CASE-HSC-12049] c31 N71-16080
- Design and construction of satellite appendage
tie-down cord
[NASA-CASE-XGS-02554] c31 N71-21064
- Development and characteristics of thermal
sensitive panel for controlling ratio of solar
absorptivity to surface emissivity for space
vehicle temperature control
[NASA-CASE-XLA-07728] c33 N71-22890
- Space expandable tether device for use as
passageway between two docked spacecraft
[NASA-CASE-XMS-10993] c15 N71-28936
- Delayed simultaneous appendage release mechanism
for use on spacecraft equipped with despin

- mechanisms and releasable components
[NASA-CASE-GSC-10814-1] c03 N73-20039
- Development of composite structures for spacecraft to serve as anti-meteoroid device
[NASA-CASE-LAR-10788-1] c31 N73-20880
- Structural heat pipe --- for spacecraft wall thermal insulation system
[NASA-CASE-GSC-11619-1] c34 N75-12222
- Auger attachment method for insulation --- of spacecraft
[NASA-CASE-MSC-12615-1] c37 N76-19437
- Particulate and solar radiation stable coating for spacecraft
[NASA-CASE-LAR-10805-2] c34 N77-16382
- SPACECRAFT TELEVISION**
Electrically operated rotary shutter for televisic camera aboard spacecraft
[NASA-CASE-XNP-00637] c14 N70-40273
- Conversion system for transforming slow scan rate of Apollo TV camera on moon to fast scan of commercial TV
[NASA-CASE-XMS-07168] c07 N71-11300
- SPACECRAFT TRACKING**
Spacecraft ranging system
[NASA-CASE-NPO-10066] c09 N71-18598
- Elimination of tracking occultation problems occurring during continuous monitoring of interplanetary missions by using Earth orbiting communications satellite
[NASA-CASE-XAC-06029-1] c31 N71-24813
- Tracking mount for laser telescope employed in tracking large rockets and space vehicles to give information regarding azimuth and elevation
[NASA-CASE-MFS-14017] c14 N71-26627
- Orbital and entry tracking accessory for globes --- to provide range requirements for reentry vehicles to any landing site
[NASA-CASE-LAR-10626-1] c19 N74-21015
- Conical scan tracking system employing a large antenna --- for tracking spacecraft or radio source
[NASA-CASE-NFO-14009-1] c32 N77-28357
- SPACECREWS**
Development and characteristics of inflatable structure to provide escape from orbit for spacecrews under emergency conditions
[NASA-CASE-XMS-06162] c31 N71-28851
- SPALLATION**
Method of producing I-123 --- by bombardment of cesium causing spallation
[NASA-CASE-LEW-11390-2] c25 N76-27383
- SPARK GAPS**
Spark gap type protective circuit for fast sensing and removal of overvoltage conditions
[NASA-CASE-XAC-08981] c05 N69-39897
- Mechanism for measuring nanosecond time differences between luminous events using streak camera
[NASA-CASE-XLA-01987] c23 N71-23976
- SPARK IGNITION**
High temperature spark plug for igniting liquid rocket propellants
[NASA-CASE-XLE-00660] c28 N70-39925
- SPARK PLUGS**
High temperature spark plug for igniting liquid rocket propellants
[NASA-CASE-XLE-00660] c28 N70-39925
- SPATIAL DISTRIBUTION**
Electronic recording system for spatial mass distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
[NASA-CASE-NFO-10185] c10 N71-26339
- SPATIAL FILTERING**
Photographic film restoration system using Fourier transformation lenses and spatial filter
[NASA-CASE-MSC-12448-1] c14 N72-20394
- Spatial filter for Q-switched lasers
[NASA-CASE-LEW-12164-1] c36 N77-32478
- SPECTRAL REFLECTANCE**
Single reflector interference spectrometer and drive system therefor
[NASA-CASE-NFO-11932-1] c35 N74-23040
- SPECTROMETERS**
Spectrometer using photoelectric effect to obtain spectral data
[NASA-CASE-XNP-04161] c14 N71-15599
- Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide frequency range and minimizing noise effects
[NASA-CASE-XNF-09830] c14 N71-26266
- Makutov spectrograph for low light level research
[NASA-CASE-XLA-10402] c14 N71-29041
- Dual purpose optical instrument capable of simultaneously acting as spectrometer and diffractometer
[NASA-CASE-XNP-05231] c14 N73-28491
- Design of gamma ray spectrometer for measurement of intense radiation using Compton scattering effect
[NASA-CASE-MFS-21441-1] c14 N73-30392
- Mossbauer spectrometer radiation detector
[NASA-CASE-LAR-11155-1] c35 N74-15091
- Single reflector interference spectrometer and drive system therefor
[NASA-CASE-NPO-11932-1] c35 N74-23040
- Spectrometer integrated with a facsimile camera
[NASA-CASE-LAR-11207-1] c35 N75-19613
- Frequency scanning particle size spectrometer
[NASA-CASE-NFO-13606-1] c35 N75-19627
- Resonant waveguide stark cell --- using microwave spectrometers
[NASA-CASE-LAR-11352-1] c33 N75-26245
- Photoelectron spectrometer with means for stabilizing sample surface potential
[NASA-CASE-NFO-13772-1] c35 N76-26450
- Ion and electron detector for use in an ICR spectrometer
[NASA-CASE-NFO-13479-1] c35 N77-10492
- SPECTROPHOTOMETERS**
Spectrophotofluorometer with 3-dimensional display to identify fluorescence spectra of carcinogenic and noncarcinogenic hydrocarbons
[NASA-CASE-XGS-01231] c14 N70-41676
- Particle size spectrometer and refractometer
[NASA-CASE-NPO-13614-1] c35 N75-19628
- High resolution Fourier interferometer-spectrophotopolarimeter
[NASA-CASE-NFO-13604-1] c35 N76-31490
- Differential optoacoustic absorption detector
[NASA-CASE-NFO-13759-1] c35 N77-11363
- SPECTROSCOPIC ANALYSIS**
Cylindrical reflector for resolving wide angle light beam from telescope into narrow beam for spectroscopic analysis
[NASA-CASE-XGS-08269] c23 N71-26206
- SPECTRUM ANALYSIS**
Spectrometer using photoelectric effect to obtain spectral data
[NASA-CASE-XNP-04161] c14 N71-15599
- Emission spectroscopy method for contamination monitoring of inert gas metal arc welding
[NASA-CASE-XNP-02039] c15 N71-15871
- Method and apparatus for high resolution power spectrum analysis
[NASA-CASE-NFO-10748] c08 N72-20177
- SPECULAR REFLECTION**
Real time reflectometer --- measurement of specular reflectance
[NASA-CASE-MFS-23118-1] c35 N77-31465
- SPEECH RECOGNITION**
Speech analyzer
[NASA-CASE-GSC-11898-1] c32 N77-30309
- SPEED CONTROL**
System for maintaining motor at predetermined speed using digital pulses
[NASA-CASE-XNP-06892] c09 N71-24805
- Optimal control system for automatic speed regulation of electric driven motor vehicle
[NASA-CASE-NFO-11210] c11 N72-20244
- Two speed drive system --- mechanical device for changing speed on rotating vehicle wheel
[NASA-CASE-MFS-20645-1] c37 N74-23070
- Low speed phaselock speed control system --- for brushless dc motor
[NASA-CASE-GSC-11127-1] c09 N75-24758
- SPEED REGULATORS**
Feedback control for direct current motor to achieve constant speed under varying loads
[NASA-CASE-MFS-14610] c09 N71-28886
- SPHERES**
Guidance analyzer having suspended spacecraft simulating sphere for astronavigation
[NASA-CASE-XNP-09572] c14 N71-15621
- Plastic sphere for radar tracking and calibration
[NASA-CASE-XLA-11154] c07 N72-21117
- SPHERICAL SBLLS**
Hollow spherical electrode for shielding

- dielectric junction between high voltage conductor and insulator
[NASA-CASE-XLE-03778] c09 N69-21542
- Development of mechanical device for measuring distance of point within sphere from surface of sphere
[NASA-CASE-XIA-06683] c14 N72-28436
- SPHERICAL TASKS**
- Gauge for measuring quantity of liquid in spherical tank in reduced gravity
[NASA-CASE-XMS-06236] c14 N71-21007
- SPHERICAL WAVES**
- Electrical device for developing converging spherical shock waves
[NASA-CASE-HFS-20890] c14 N72-22439
- SPHYGMOGRAPHY**
- A logic-controlled occlusive cuff system
[NASA-CASE-MSC-14836-1] c52 N76-27839
- SPIKE NOZZLES**
- Constructing fluid spike nozzle to eliminate heat transfer and high temperature problems inherent in physical spikes
[NASA-CASE-XGS-01143] c31 N71-15647
- SPIN DYNAMICS**
- Nutation damper for use on spinning body
[NASA-CASE-GSC-11205-1] c15 N73-25513
- SPIN REDUCTION**
- Optical scanner mounted on rotating support structure with method of compensating for image or satellite rotation
[NASA-CASE-XGS-02401] c14 N69-27485
- Bolt-latch mechanism for releasing despin weights from space vehicle
[NASA-CASE-XIA-00679] c15 N70-38601
- Stretch Yc-Yo mechanism for reducing initial spin rate of space vehicle
[NASA-CASE-XGS-00619] c30 N70-40016
- Stage separation system for spinning vehicles and payloads
[NASA-CASE-XIA-02132] c31 N71-10582
- Flexible turnstile antenna system for reducing nutation in spin-oriented satellites
[NASA-CASE-XMF-00442] c31 N71-10747
- SPIN STABILIZATION**
- Dynamic precession damping of spin-stabilized vehicles by using rate gyroscope and angular accelerometer
[NASA-CASE-XIA-01989] c21 N70-34295
- Attitude orientation control of spin stabilized final stage space vehicles, using horizon scanners
[NASA-CASE-XIA-00281] c21 N70-36943
- Attitude detection system using stellar references for three-axis control and spin stabilized spacecraft
[NASA-CASE-XGS-03431] c21 N71-15642
- Spin phase synchronization of cartwheel satellite in polar orbit
[NASA-CASE-XGS-05579] c31 N71-15676
- High velocity guidance and spin stabilization gyro controlled jet reaction system for launch vehicle payloads
[NASA-CASE-XIA-01339] c31 N71-15692
- Passive dual spin misalignment compensators --- gyro stabilized device
[NASA-CASE-GSC-11479-1] c35 N74-28097
- Deployable flexible ventral fins for use as an emergency spin recovery device in aircraft
[NASA-CASE-LAR-10753-1] c08 N74-30421
- Thrust augmented spin recovery device
[NASA-CASE-LAR-11970-1] c08 N77-22147
- SPIRAL WRAPPING**
- Adjustable spiral wire winding device
[NASA-CASE-XMS-02383] c15 N71-15918
- SPIRALS (CONCENTRATORS)**
- Spiral groove seal --- for hydraulic rotating shaft
[NASA-CASE-LEW-10326-3] c37 N74-10474
- SPIROCHETES**
- Compact bellows spirometer for high speed and high altitude space travel
[NASA-CASE-XAR-01547] c05 N69-21473
- SPLASHING**
- Splash groove fuel injector
[NASA-CASE-LEW-12417-1] c07 N76-22198
- SPLINTS**
- Non-floating universal joint
[NASA-CASE-MSC-19546-1] c37 N77-25536
- SPLINTS**
- Stretcher with rigid head and neck support with capability of supporting immobilized person in vertical position for removal from vehicle hatch to exterior also useful as splint stretcher
[NASA-CASE-XNP-06589] c05 N71-23159
- SPORES**
- Lyophilized spore dispenser
[NASA-CASE-LAR-10544-1] c37 N74-13178
- SPOT WELDS**
- Controlled arc spot welding method
[NASA-CASE-XNP-00392] c15 N70-34814
- Automatic closed circuit television arc guidance control for welding joints
[NASA-CASE-HFS-13046] c07 N71-19433
- Electric resistance spot welding and brazing for producing metal bonds with superior mechanical and structural characteristics
[NASA-CASE-LAR-11072-1] c15 N73-20535
- SPRAYED COATINGS**
- Plasma spraying gun for forming diffusion bonded metal or ceramic coatings on substrates
[NASA-CASE-XLE-01604-2] c15 N71-15610
- Production and application of sprayable fiber reinforced ablation material
[NASA-CASE-XIA-04251] c18 N71-26100
- Metal plating process employing spraying of metallic power/peening particle mixture
[NASA-CASE-GSC-11163-1] c15 N73-32360
- Sprayable low density ablator
[NASA-CASE-HFS-23506-1] c24 N77-15105
- Apparatus for automatically spraying a coating material
[NASA-CASE-HFS-23506-2] c37 N77-20441
- SPRAYERS**
- External device for liquid spray cooling of gas turbine blades
[NASA-CASE-XLE-00037] c28 N70-33372
- Adhesive spray process for attaching biomedical skin electrodes
[NASA-CASE-XPR-07658-1] c05 N71-26293
- Apparatus for liquid spray cooling of turbine blades
[NASA-CASE-XLE-00027] c33 N71-29152
- Closed loop spray cooling apparatus --- for particle accelerator targets
[NASA-CASE-LEW-11981-1] c37 N76-20486
- Apparatus for automatically spraying a coating material
[NASA-CASE-HFS-23506-2] c37 N77-20441
- SPRAYING**
- Aircraft wheel spray drag alleviator for dual tandem landing gear
[NASA-CASE-XIA-01583] c02 N70-36825
- SPREADING**
- Tool attachment for spreading or moving away loose elements from terminal posts during winding of filamentary elements
[NASA-CASE-XNP-02107] c15 N71-10809
- SPRINGS (ELASTIC)**
- Bellefonte spring assembly with elastic guides having low hysteresis
[NASA-CASE-XNP-09452] c15 N69-27504
- Multiple Bellefonte spring assembly with even load distribution
[NASA-CASE-XNP-00840] c15 N70-38225
- Switching mechanism with energy stored in coil spring
[NASA-CASE-XGS-00473] c03 N70-38713
- Load cell protection device using spring-loaded breakaway mechanism
[NASA-CASE-XMS-06782] c32 N71-15974
- Vibration isolation system, using coaxial helical compression springs
[NASA-CASE-HPO-11012] c15 N72-11391
- Spring operated accelerator and constant force spring mechanism therefor
[NASA-CASE-ARC-10898-1] c35 N77-18417
- SPUTTERING**
- Deposition method for epitaxial beta SiC films having high degree of crystallographic perfection
[NASA-CASE-FRC-10120] c26 N69-33482
- Development of procedure for producing thin transparent films of zinc oxide on transparent refractory substrate
[NASA-CASE-FRC-10019] c15 N73-12487

- Technique and equipment for sputtering using
apertured electrode and pulsed substrate bias
[NASA-CASE-LW-10920-1] c17 N73-24569
- Sputtering holes with ion beamlets
[NASA-CASE-LW-11646-1] c20 N74-31269
- Multitarget sequential sputtering apparatus
[NASA-CASE-NFO-13345-1] c37 N75-19684
- Multilevel metallization method for fabricating
a metal oxide semiconductor device
[NASA-CASE-MFS-23541-1] c33 N77-27308
- SQUARE WAVES**
High speed phase detector design indicating
phase relationship between two square wave
input signals
[NASA-CASE-INP-01306-2] c09 N71-24596
- SQUARES (MATHEMATICS)**
Apparatus for computing square roots
[NASA-CASE-XGS-04768] c08 N71-19437
- SQUIBS**
Contamination free separation nut eliminating
combustion products from ambient surroundings
generated by squib firing
[NASA-CASE-IGS-01971] c15 N71-15922
- STABILITY TESTS**
Method and apparatus for checking the stability
of a setup for making reflection type holograms
[NASA-CASE-MFS-21455-1] c35 N74-15146
- STABILIZATION**
Electro-optical stabilization of calibrated
light source
[NASA-CASE-NSC-12293-1] c14 N72-27411
- System for controlling torque buildup in
suspension of gondola connected to balloon by
parachute shroud lines
[NASA-CASE-GSC-11077-1] c02 N73-13008
- Development of aerodynamic control system to
control flutter over large range of
oscillatory frequencies using stability
augmentation techniques
[NASA-CASE-LAR-1C682-1] c02 N73-26004
- Radiation hardening of MOS devices by boron ---
for stabilizing gate threshold potential
[NASA-CASE-GSC-11425-2] c76 N75-25730
- Tetherline system for orbiting satellites
[NASA-CASE-MFS-23564-1] c13 N77-11079
- Arc control in compact arc lamps
[NASA-CASE-NFO-10870-1] c33 N77-22386
- STABILIZED PLATFORMS**
Hydraulic drive mechanism for leveling isolation
platforms
[NASA-CASE-XMS-03252] c15 N71-10658
- Failure detection and control means for improved
drift performance of a gimbaled platform system
[NASA-CASE-MFS-23551-1] c04 N76-26175
- Rotary leveling base platform
[NASA-CASE-ARC-10981-1] c35 N77-10498
- STABILIZERS**
Design and development of satellite despin device
[NASA-CASE-INP-08523] c31 N71-20396
- STABILIZERS (AGENTS)**
Solid propellant stabilizer containing
nitroguanidine
[NASA-CASE-NFO-12000] c27 N72-25699
- STABILIZERS (FLUID DYNAMICS)**
Assembly for opening flight capsule stabilizing
and decelerating flaps with reference to
capsule recovery
[NASA-CASE-INP-00641] c31 N70-36410
- Mechanical stabilization system for VTOL aircraft
[NASA-CASE-XIA-06339] c02 N71-13422
- Attitude stabilizer for nonguided missile or
vehicle with respect to trajectory
[NASA-CASE-ARC-10134] c30 N72-17873
- Inflatable stabilizing system for use on life
raft to reduce rocking and preclude capsizing
[NASA-CASE-NSC-12393-1] c02 N73-26006
- Externally supported internally stabilized
flexible duct joint
[NASA-CASE-MFS-19194-1] c37 N76-14460
- STABLE OSCILLATIONS**
Automatic measuring and recording of gain and
zero drift characteristics of electronic
amplifier
[NASA-CASE-XMS-05562-1] c09 N69-39986
- STACKS**
Remote fire stack igniter --- with
solenoïd-controlled valve
[NASA-CASE-MFS-21675-1] c25 N74-33378
- STAGE SEPARATION**
Stage separation using remote control release of
joint with explosive insert
[NASA-CASE-XIA-02854] c15 N69-27490
- Piezoelectric means for missile stage separation
indication and stage initiation
[NASA-CASE-XIA-00791] c03 N70-39930
- Space vehicle stage coupling and quick release
separation mechanism
[NASA-CASE-XIA-01441] c15 N70-41679
- Stage separation system for spinning vehicles
and payloads
[NASA-CASE-XIA-02132] c31 N71-10582
- Payload/spent rocket engine case separation system
[NASA-CASE-XIA-05369] c31 N71-15687
- Separation mechanism for use between stages of
multistage rocket vehicles
[NASA-CASE-XIA-00188] c15 N71-22874
- Development of remotely controlled shaped charge
for lateral displacement of rocket stages
after separation
[NASA-CASE-XIA-04804] c31 N71-23008
- Electrical circuit selection device for
simulating stage separation of flight vehicle
[NASA-CASE-XKS-04631] c10 N71-23663
- Frangible connecting link suitable for rocket
stage separation
[NASA-CASE-NSC-11849-1] c15 N72-22488
- STAGNATION PRESSURE**
Flow meter for measuring stagnation pressure in
boundary layer around high speed flight vehicle
[NASA-CASE-IFR-02007] c12 N71-24692
- Stagnation pressure probe --- for measuring
pressure of supersonic gas streams
[NASA-CASE-LAR-11139-1] c35 N74-32878
- STAGNATION TEMPERATURE**
Measuring conductive heat flow and thermal
conductivity of laminar gas stream in
cylindrical plug to simulate atmospheric reentry
[NASA-CASE-XLE-00266] c14 N70-34156
- STAINING**
Automated single-slide staining device
[NASA-CASE-LAR-11649-1] c51 N77-27677
- STAINLESS STEELS**
Joining aluminum to stainless steel by bonding
aluminum coatings onto titanium coated
stainless steel and brazing aluminum to
aluminum/titanium coated steel
[NASA-CASE-MFS-07369] c15 N71-20443
- Ultrasonic scanning system for in-place
inspection of brazed tube joints
[NASA-CASE-MFS-20767-1] c38 N74-15130
- Method of forming a wick for a heat
pipe
[NASA-CASE-NFO-13391-1] c34 N76-27515
- Method of making reinforced composite structure
[NASA-CASE-LW-12619-1] c24 N77-19171
- Stainless steel panel for selective absorption
of solar energy and the method of producing
said panel
[NASA-CASE-MFS-23518-2] c44 N77-31611
- STAR TRACKERS**
Star sensor system for roll attitude control of
spacecraft
[NASA-CASE-INP-01307] c21 N70-41856
- Sun tracker with rotatable plane-parallel plate
and two photocells
[NASA-CASE-XGS-01159] c21 N71-10678
- Photomultiplier detector of Canopus for
spacecraft attitude control
[NASA-CASE-INP-03914] c21 N71-10771
- Attitude detection system using stellar
references for three-axis control and spin
stabilized spacecraft
[NASA-CASE-XGS-03431] c21 N71-15642
- Relay controlled voltage switching unit for
scanning circuitry of star tracker
[NASA-CASE-NFO-11253] c09 N72-17157
- Method for producing reticles for use in outer
space
[NASA-CASE-GSC-11188-2] c21 N73-19630
- Production method of star tracking reticles for
transmitting in visible and near ultraviolet
regions
[NASA-CASE-GSC-11188-1] c14 N73-32320
- Formation of star tracking reticles
[NASA-CASE-GSC-11188-3] c74 N74-20008
- Star scanner --- with a reticle with a pair of
slits having differing separation
[NASA-CASE-GSC-11569-1] c89 N74-30886

STARK EFFECT

SUBJECT INDEX

STARK EFFECT

Resonant waveguide stark cell --- using
microwave spectrometers
[NASA-CASE-LAR-11352-1] c33 N75-26245
Stark-effect modulation of CO2 laser with NH2D
[NASA-CASE-NPO-11945-1] c36 N76-18427

STARTERS

Starting circuit design for initiating and
maintaining arcs in vapor lamps
[NASA-CASE-XNP-01058] c09 N71-12540
Motor run-up system --- power lines
[NASA-CASE-NPO-13374-1] c33 N75-19524

STATIC FRICTION

Kinetic and static friction force measurement
between magnetic tape and magnetic head surfaces
[NASA-CASE-XNP-08680] c14 N71-22995
Static coefficient test method and apparatus
[NASA-CASE-GSC-11893-1] c35 N76-31489

STATIC INVERTERS

Describing static inverter with single or
multiple phase output
[NASA-CASE-XNP-00663] c08 N71-18752
Development and characteristics of oscillating
static inverter
[NASA-CASE-XGS-05289] c09 N71-19470

STATIC LOADS

Measuring shear-creep compliance of solid and
liquid materials used in spacecraft components
[NASA-CASE-XLB-01481] c14 N71-10781
Apparatus for measuring load on cable under
static or dynamic conditions comprising
pulleys pivoting structure against restraint
of tension strap
[NASA-CASE-XNS-04545] c15 N71-22878

STATIC PRESSURE

Pressure probe for sensing ambient static air
pressures
[NASA-CASE-XLA-00481] c14 N70-36824
Ambient atmospheric pressure sensing device for
determining altitude of flight vehicles
[NASA-CASE-XLA-00128] c15 N70-37925
Static pressure probe
[NASA-CASE-LAR-11552-1] c35 N76-14429

STATIONKEEPING

Method of stationkeeping for lenticular gravity
gradient satellites
[NASA-CASE-XLA-03132] c31 N71-22969

STATISTICAL CORRELATION

Optical sensing of supersonic flows by
correlating deflections in laser beams through
flow
[NASA-CASE-NFS-20642] c14 N72-21407

STATOR BLADES

Stator rotor tools
[NASA-CASE-MSC-16000-1] c07 N77-13062

STATORS

Nickel base alloy --- for gas turbine engine
stator vanes
[NASA-CASE-LEW-12270-1] c26 N77-32280

STEADY STATE

Steady state thermal radiometers
[NASA-CASE-NFS-21108-1] c34 N74-27861

STEAM TURBINES

Vapor generating boiler system for turbine motor
[NASA-CASE-XLF-00785] c33 N71-16104

STEELS

Zinc dust formulation for abrasion resistant
steel coatings
[NASA-CASE-GSC-10361-1] c18 N72-23581

STEEPERABLE ANTENNAS

Apparatus for generating microwave signals at
progressively related phase angles for driving
antenna array
[NASA-CASE-ERC-10046] c10 N71-18722
Satellite radio communication system with remote
steerable antenna
[NASA-CASE-XNP-02389] c07 N71-28900
Amplitude steered array
[NASA-CASE-GSC-11446-1] c33 N74-20860
Phase array antenna control
[NASA-CASE-MSC-14939-1] c33 N77-19320

STIRRING

Steerable solid propellant rocket motor adapted
to effect payload orientation as multistage
rocket stage or reduce velocity as retrorocket
[NASA-CASE-XNP-00234] c28 N70-38645

STELLAR LUMINOSITY

Development of star intensity measuring system
which minimizes effects of outside interference

[NASA-CASE-XNF-06510] c14 N71-23797

STELLAR SPECTRA

Development of star intensity measuring system
which minimizes effects of outside interference
[NASA-CASE-XNP-06510] c14 N71-23797

STEREOPHOTOGRAPHY

Stereo photomicrography system with stereo
microscope for viewing specimen at various
magnifications
[NASA-CASE-LAR-10176-1] c14 N72-20380
Field sequential stereo television
[NASA-CASE-MSC-12616-1] c32 N74-32601

STEREOSCOPIC VISION

Stereoscopic television system, including
projecting pair of binocular images
[NASA-CASE-ARC-10160-1] c23 N72-27728

STERILIZATION

Using ethylene oxide in preparation of
sterilized solid rocket propellants and
encapsulating materials
[NASA-CASE-XNP-01749] c27 N70-41897
Ethylene oxide sterilization and encapsulating
process for sterile preservation of
instruments and solid propellants
[NASA-CASE-XNP-09763] c14 N71-20461
Environmentally controlled suit for working in
sterile chamber
[NASA-CASE-LAR-10076-1] c05 N73-20137
Protein sterilization of firefly luciferase
without denaturation
[NASA-CASE-GSC-10225-1] c06 N73-27086
Heat sterilizable patient ventilator
[NASA-CASE-NPO-13313-1] c54 N75-27761

STERILIZATION EFFECTS

Reliability of electrical connectors after heat
sterilization
[NASA-CASE-NPO-10694] c09 N72-20200

STIMULATED EMISSION

Repetitively pulsed wavelength selective carbon
dioxide laser
[NASA-CASE-ERC-10178] c16 N71-24832

STIRLING CYCLE

Stirling cycle engine and refrigeration systems
[NASA-CASE-NPO-13613-1] c37 N76-29590

STIRRING

Design of mechanical device for stirring several
test tubes simultaneously
[NASA-CASE-XAC-06956] c15 N71-21177

STORAGE

Design and development of fluid sample collector
[NASA-CASE-XNS-06767-1] c14 N71-20435

STORAGE BATTERIES

Leak resistant bonded elastomeric seal for
secondary electrochemical cells
[NASA-CASE-XGS-02631] c03 N71-23006
Automatically charging battery of electric
storage cells
[NASA-CASE-XNP-04758] c03 N71-24605
Elimination of two step voltage discharge
property of silver zinc batteries by using
divalent silver oxide capacity of cell to
charge anodes to monovalent silver state
[NASA-CASE-XGS-01674] c03 N71-29129
Electric storage battery with high impact
resistance
[NASA-CASE-NPO-11021] c03 N72-20032
Hydrogen-bromine secondary battery
[NASA-CASE-NPO-13237-1] c44 N76-18641
Rechargeable battery which combats shape change
of the zinc anode
[NASA-CASE-EQN-10862-1] c44 N76-29699
Electrically rechargeable REDOX flow cell
[NASA-CASE-LEW-12220-1] c44 N77-14581
Formulated plastic separators for soluble
electrode cells --- rubber-ion transport sheeting
[NASA-CASE-LEW-12358-1] c44 N77-18560

STORAGE STABILITY

Storage stable, thermally activated foaming
compositions for erecting and rigidizing
mechanisms of thin sheet solar collectors
[NASA-CASE-LAR-10373-1] c18 N71-26155
Atomic hydrogen storage method and apparatus ---
in strong magnetic fields
[NASA-CASE-LEW-12081-1] c28 N76-22399

STORAGE TANKS

Expulsion bladder equipped storage tank structure
[NASA-CASE-XNP-00612] c11 N70-38182
Development of apparatus and method for testing
leakage of large tanks

- [NASA-CASE-XMF-02392] c32 N71-24285
- STRAIN GAGE ACCELEROMETERS**
- Accelerometer with FM output signals indicative of mechanical strain on it [NASA-CASE-XIA-00492] c14 N70-34799
- Strain gage accelerometer for angular acceleration measurement [NASA-CASE-XMS-05936] c14 N70-41682
- STRAIN GAGE BALANCES**
- Self-balancing strain gage transducer with bridge circuit [NASA-CASE-MFS-12827] c14 N71-17656
- STRAIN GAGES**
- Semiconductor p-n junction on needle apex to provide stress and strain sensor [NASA-CASE-XLA-04980] c09 N69-27422
- Apparatus for forming wire grids for electric strain gages [NASA-CASE-XLE-00023] c15 N70-33330
- Force measuring instrument for structural members, particularly fastening bolts or studs [NASA-CASE-XMF-00456] c14 N70-34705
- Difference indicating circuit used in conjunction with device measuring gravitational fields [NASA-CASE-XMP-06274] c10 N71-13537
- Water cooled gage for strain measurements in high temperature environments [NASA-CASE-XNP-09205] c14 N71-17657
- Development of apparatus for measuring successive increments of strain on elastomers [NASA-CASE-XNP-04680] c15 N71-19489
- Strain gage measurement of elongation due to thermally and mechanically induced stresses [NASA-CASE-XGS-04478] c14 N71-24233
- Method for temperature compensating semiconductor gages by exposure to high energy radiation [NASA-CASE-XLA-04555-1] c14 N71-25892
- Pulsed excitation voltage circuit for strain gage bridge transducers [NASA-CASE-PRC-10036] c09 N72-22200
- Method for making semiconductor p-n junction stress and strain sensor [NASA-CASE-XIP-04980-2] c14 N72-28438
- Device for monitoring a change in mass in varying gravimetric environments [NASA-CASE-MFS-21556-1] c35 N74-26945
- Strain gage ambiguity sensor for segmented mirror active optical system [NASA-CASE-MFS-20506-1] c35 N75-12273
- Subminiature insertable force transducer --- including a strain gage to measure forces in muscles [NASA-CASE-NPO-13423-1] c33 N75-31329
- Self-supporting strain transducer [NASA-CASE-LAR-11263-1] c35 N75-33369
- Strain gage mounting assembly [NASA-CASE-NFO-13170-1] c35 N76-14430
- High temperature strain gage calibration fixture [NASA-CASE-LAR-11500-1] c35 N76-24523
- Miniature biaxial strain transducer [NASA-CASE-LAR-11648-1] c35 N77-14407
- A CW ultrasonic bolt tensioning monitor [NASA-CASE-LAR-12016-1] c32 N77-15236
- STRAIN RATE**
- Process for analysis of strain field of structures subjected to large deformations involving low modulus substrate with thin coating [NASA-CASE-LAR-10765-1] c32 N73-20740
- STRAPDOWN INERTIAL GUIDANCE**
- All sky pointing attitude control system [NASA-CASE-ARC-10716-1] c35 N77-20399
- STRAPS**
- Meter for use in detecting tension in straps having predetermined elastic characteristics [NASA-CASE-MFS-22189-1] c35 N75-19615
- STRESS ANALYSIS**
- Development of system for measuring damping characteristics of structure or system subjected to random forces or influences [NASA-CASE-ARC-10154-1] c14 N72-22440
- Process for analysis of strain field of structures subjected to large deformations involving low modulus substrate with thin coating [NASA-CASE-LAR-10765-1] c32 N73-20740
- High temperature strain gage calibration fixture [NASA-CASE-LAR-11500-1] c35 N76-24523
- STRESS CONCENTRATION**
- Self-supporting strain transducer [NASA-CASE-LAR-11263-1] c35 N75-33369
- Method of electrically pre-stressing insulation to provide directional increase in dc potential breakdown [NASA-CASE-LEW-12273-1] c33 N77-17357
- STRESS CORROSION**
- Method to prevent stress corrosion cracking in titanium alloys [NASA-CASE-NFO-10271] c17 N71-16393
- Method and apparatus for inducing compressive stresses in pressure vessel to prevent stress corrosion [NASA-CASE-XLA-07390] c15 N71-18616
- STRESS MEASUREMENT**
- Semiconductor p-n junction on needle apex to provide stress and strain sensor [NASA-CASE-XLA-04980] c09 N69-27422
- Force measuring instrument for structural members, particularly fastening bolts or studs [NASA-CASE-XMF-00456] c14 N70-34705
- Self-balancing strain gage transducer with bridge circuit [NASA-CASE-MFS-12827] c14 N71-17656
- Servocontrol system for measuring local stresses at geometric discontinuity in stressed material [NASA-CASE-XLA-08530] c32 N71-25360
- A CW ultrasonic bolt tensioning monitor [NASA-CASE-LAR-12016-1] c32 N77-15236
- Amplifying ribbon extensometer [NASA-CASE-LAR-11825-1] c35 N77-22449
- STRESS RELIEVING**
- Nut and bolt fastener permitting all-directional movement of skin sections with respect to supporting structure [NASA-CASE-XLA-01807] c15 N71-10799
- STRESSSES**
- Tape recorder designed for low power consumption and resistance to operational failure under high stress conditions [NASA-CASE-XGS-08259] c14 N71-23698
- Strain gage measurement of elongation due to thermally and mechanically induced stresses [NASA-CASE-XGS-04478] c14 N71-24233
- Strain arrestor plate for fused silica tile --- bonding of thermal insulation to metallic plates or structural parts [NASA-CASE-MSC-14182-1] c27 N76-14264
- STRETCHERS**
- Development and characteristics of rescue litter with inflatable flotation device for water rescue application [NASA-CASE-XMS-04170] c05 N71-22748
- Stretcher with rigid head and neck support with capability of supporting immobilized person in vertical position for removal from vehicle hatch to exterior also useful as splint stretcher [NASA-CASE-XMP-06589] c05 N71-23159
- STRETCHING**
- Device for securing together structural members with axially stretched bolt and nut [NASA-CASE-GSC-11149-1] c15 N73-30457
- STRINGS**
- Cord restraint system for pressure suit joints [NASA-CASE-XMS-09635] c05 N71-24623
- STRIP**
- A solar array strip and a method for forming the same [NASA-CASE-NPO-13652-1] c44 N77-28585
- STRUCTURAL ANALYSIS**
- Window defect planar mapping technique [NASA-CASE-MSC-19442-1] c74 N77-10899
- STRUCTURAL DESIGN**
- Structural design of high pressure regulator valve [NASA-CASE-XMF-00710] c15 N71-10778
- Graphic illustration of lifting body design [NASA-CASE-PRC-10063] c01 N71-12217
- Design of ring wing vehicle of high drag-to-weight ratio to withstand reentry stress into low density atmosphere [NASA-CASE-XLA-04901] c31 N71-24315
- Opto-mechanical subsystem with temperature compensation through isothermal design [NASA-CASE-GSC-12059-1] c35 N77-27366

- Lightweight reflector assembly
[NASA-CASE-NFO-13707-1] c74 N77-28933
- STRUCTURAL ENGINEERING**
- Composite sandwich lattice structure
[NASA-CASE-LAR-11898-2] c24 N77-26242
- Apparatus for assembling space structure
[NASA-CASE-MFS-23579-1] c12 N77-31213
- STRUCTURAL FAILURE**
- Method and apparatus for nondestructive testing
of pressure vessels
[NASA-CASE-NFO-12142-1] c38 N76-28563
- STRUCTURAL MEMBERS**
- Broadband chokes and absorbers to reduce
spurious radiation patterns of antenna array
caused by support structures
[NASA-CASE-XMS-05303] c07 N69-27462
- Electro-optical/computer system for aligning
large structural members and maintaining
correct position
[NASA-CASE-XNF-02029] c14 N70-41955
- Nut and bolt fastener permitting all-directional
movement of skin sections with respect to
supporting structure
[NASA-CASE-XLA-01807] c15 N71-10799
- Universal joints for connecting two displaced
shafts or members
[NASA-CASE-NFO-10646] c15 N71-28467
- Fabrication of light weight panel structure
using pairs of elongate hollow ribs of
semicircular configuration
[NASA-CASE-LAR-11052-1] c32 N73-13929
- Device for securing together structural members
with axially stretched bolt and nut
[NASA-CASE-GSC-11149-1] c15 N73-30457
- Method of laminating structural members
[NASA-CASE-XLA-11028-1] c24 N74-27035
- Folding structure fabricated of rigid panels
[NASA-CASE-XHO-02146] c18 N75-27040
- Strain arrestor plate for fused silica tile ---
bonding of thermal insulation to metallic
plates or structural parts
[NASA-CASE-MSC-14182-1] c27 N76-14264
- STRUCTURAL STABILITY**
- Flanged major modular assembly jig
[NASA-CASE-MSC-19372-1] c39 N76-31562
- STRUCTURAL VIBRATION**
- Rectangular electric conductors for conductor
cables to withstand spacecraft vibration and
controlled atmosphere
[NASA-CASE-MFS-14741] c09 N70-20737
- Determining sway of buildings by low frequency
device using pendulum
[NASA-CASE-XNF-00479] c14 N70-34794
- Transducer for measuring deflections from
vibrating structures
[NASA-CASE-XLA-03135] c32 N71-16428
- STRUCTURES**
- Deformation measuring apparatus with feedback
control for arbitrarily shaped structures
[NASA-CASE-LAR-10098] c32 N71-26681
- STRUTS**
- Low onset rate energy absorber in form of strut
assembly for crew couch of Apollo command module
[NASA-CASE-MSC-12279-1] c15 N70-35679
- Collapsible support for antenna reflector
applied to installation of spacecraft antennas
[NASA-CASE-NFO-11751] c07 N73-24176
- Automatically lockable axially extensible strut
--- for helicopters
[NASA-CASE-LAR-11900-1] c05 N77-18134
- STUDS (STRUCTURAL MEMBERS)**
- Design of quick release locking pin for joining
two or more load-carrying structural members
[NASA-CASE-MFS-18495] c15 N72-11385
- Tool for mounting and removing studs with
adhesive coated head portion
[NASA-CASE-MFS-20299] c15 N72-11392
- Insert facing tool --- manually operated cutting
tool for forming studs in honeycomb material
[NASA-CASE-MFS-21485-1] c37 N74-25968
- STYRENES**
- Heat resistant polymers of oxidized
styrylphosphine
[NASA-CASE-MSC-14903-1] c27 N76-28425
- SUBLIMATION**
- Tubular sublimatory evaporator heat sink
[NASA-CASE-AEC-10912-1] c34 N77-19353
- SUBMINIATURIZATION**
- Microniscampere current measuring circuit, with
two subminiature thermionic diodes with
filament cathodes
[NASA-CASE-XNF-00384] c09 N71-13530
- SUBREFLECTORS**
- Dish antenna having switchable beamwidth ---
with truncated concave ellipsoid subreflector
[NASA-CASE-GSC-11760-1] c33 N75-19516
- SUBSONIC SPEED**
- Aerospace vehicle with variable planform for
hypersonic and subsonic flight
[NASA-CASE-XLA-00805] c31 N70-38010
- Construction of leading edges of surfaces for
aerial vehicles performing from subsonic to
above transonic speeds
[NASA-CASE-XLA-01486] c01 N71-23497
- Airfoil shape for flight at subsonic speeds ---
design analysis and aerodynamic
characteristics of the GAW-1 airfoil
[NASA-CASE-LAR-10585-1] c02 N76-22154
- SUBSONIC WIND TUNNELS**
- Variable geometry wind tunnel for testing
aircraft models at subsonic speeds
[NASA-CASE-XLA-07430] c11 N72-22246
- SUBSTRATES**
- Means and methods of depositing thin films on
substrates
[NASA-CASE-XNF-00595] c15 N70-34967
- Fabrication of solar cell banks for attaching
solar cells to base members or substrates
[NASA-CASE-XNF-00826] c03 N71-20895
- Method and apparatus for fabricating solar cell
panels
[NASA-CASE-XNF-03413] c03 N71-26726
- Fabrication of polycrystalline solar cells on
low-cost substrates
[NASA-CASE-GSC-12022-1] c44 N76-28635
- A complementary DMOS-VMOS integrated circuit
structure
[NASA-CASE-GSC-12190-1] c33 N77-29403
- SUBSTRUCTURES**
- Supporting structure for simultaneous exposure
of pellets to X rays
[NASA-CASE-XNF-06031] c15 N71-15606
- Opto-mechanical subsystem with temperature
compensation through isothermal design
[NASA-CASE-GSC-12059-1] c35 N77-27366
- SULFATES**
- Nitroaniline sulfate, intumescent paints
[NASA-CASE-ARC-10099-1] c18 N71-15469
- SULFONES**
- Electrolytic cell structure
[NASA-CASE-LAR-11042-1] c33 N75-27252
- SULFUR COMPOUNDS**
- Mercaptan terminated polymer containing sulfonic
acid salts of nitrosubstituted aromatic amines
for heat and moisture resistant coatings
[NASA-CASE-ARC-10325] c06 N72-25147
- SULFUR DIOXIDES**
- Stack plume visualization system
[NASA-CASE-LAR-11675-1] c45 N76-17656
- Process for removing sulfur dioxide from gas
streams --- using iron as a catalyst
[NASA-CASE-MSC-16299-1] c45 N77-31668
- SUM RULES**
- Describing circuit for obtaining sum of squares
of numbers
[NASA-CASE-IGS-04765] c08 N71-18693
- SUNGLASSES**
- Flexible frame for sunglasses in emergency
survival kits
[NASA-CASE-XMS-06064] c05 N71-23096
- SUNLIGHT**
- Illumination system design for use as sunlight
simulator in space environment simulators with
multiple light sources reflected to single
virtual source
[NASA-CASE-HQN-10781] c23 N71-30292
- Illumination control apparatus for compensating
solar light
[NASA-CASE-KSC-11010-1] c44 N77-15493
- SUPERCONDUCTING MAGNETS**
- Cryogenic flux-gated magnetometer using
superconductors
[NASA-CASE-IAC-02407] c14 N69-27423
- Improved alternator with windings of
superconducting materials acting as permanent
magnet
[NASA-CASE-XLB-02824] c03 N69-39890

SUBJECT INDEX

SUPPORTS

- Segmented superconducting magnet producing staggered magnetic field and suitable for broadband traveling wave masers
[NASA-CASI-XGS-10518] c16 N71-28554
- Operating properties of superconducting magnet in vacuum environment
[NASA-CASE-IXP-06503] c23 N71-29049
- Magnetometer using superconducting rotating body
[NASA-CASE-NPO-13388-1] c35 N76-16390
- SUPERCONDUCTIVITY**
- Superconducting alternator design with cryogenic fluid for cooling windings below critical temperature
[NASA-CASE-XLE-02823] c09 N71-23443
- Superconductive resonant cavity for improved signal to noise ratio in communication signal
[NASA-CASI-MSC-12259-2] c07 N72-33146
- Superconducting magnetic field trapping device for producing magnetic field in air
[NASA-CASE-IXP-01185] c26 N73-28710
- Doped Josephson tunneling junction for use in a sensitive IR detector
[NASA-CASE-NPO-13348-1] c33 N75-31332
- SUPERCONDUCTORS**
- Superconductive accelerometer employing variable force principle to determine acceleration of bodies
[NASA-CASE-IXF-01099] c14 N71-15969
- Controlled diffusion reaction process for masking substrate of twisted multifilament superconductive ribbon
[NASA-CASE-LEW-11726-1] c26 N73-26752
- Twisted wire or tube superconductor for filament windings
[NASA-CASE-LEW-11015] c26 N73-32571
- SUPERFLUIDITY**
- Helium refining by superfluidity
[NASA-CASE-IXP-00733] c06 N70-34946
- Method and apparatus for generating coherent radiation in the ultra-violet region and above by use of distributed feedback
[NASA-CASE-NPO-13346-1] c36 N76-29575
- SUPERHEATING**
- Thermal energy storage system --- operating on superheating of liquids
[NASA-CASE-MFS-23167-1] c44 N76-31667
- SUPERHIGH FREQUENCIES**
- Independent gain and bandwidth control of a traveling wave maser
[NASA-CASE-NPO-13801-1] c36 N76-31514
- Swept group delay measurement
[NASA-CASE-NPO-13909-1] c33 N77-17358
- Redundant RF system for space applications
[NASA-CASE-NPO-13955-1] c32 N77-28358
- SUPERSONIC AIRCRAFT**
- Variable sweep wing configuration for supersonic aircraft
[NASA-CASI-XLA-00230] c02 N70-33255
- Supersonic aircraft variable sweep wing planform for varying aspect ratio
[NASA-CASI-XLA-00350] c02 N70-38011
- Development and characteristics of variable sweep wing control system for supersonic aircraft
[NASA-CASE-XLA-03659] c02 N71-11041
- Development and characteristics of translating horizontal tail assembly for supersonic aircraft
[NASA-CASE-XLA-08801-1] c02 N71-11043
- Design of supersonic aircraft with novel fixed, swept wing planform
[NASA-CASE-XLA-04451] c02 N71-12243
- Absorptive, nonreflecting barrier mounted between closely spaced jet engines on supersonic aircraft, for preventing shock wave interference
[NASA-CASI-XIA-02865] c28 N71-15563
- Oblique-wing supersonic aircraft
[NASA-CASI-ARC-10470-3] c05 N76-29217
- SUPERSONIC COMBUSTION**
- Supersonic-combustion rocket
[NASA-CASE-LEW-11058-1] c20 N74-13502
- SUPERSONIC DRAG**
- Bluff-shaped annular configuration for supersonic decelerator for reentry vehicles
[NASA-CASE-XLE-00222] c02 N70-37939
- SUPERSONIC FLIGHT**
- Variable aspect ratio and variable sweep delta wing planforms for supersonic aircraft
[NASA-CASE-XLA-00221] c02 N70-33266
- Supersonic or hypersonic vehicle control system comprising elevons with hinge line sweep and free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088
- SUPERSONIC FLOW**
- Optical sensing of supersonic flows by correlating deflections in laser beams through flow
[NASA-CASE-MFS-20642] c14 N72-21407
- Stagnation pressure probe --- for measuring pressure of supersonic gas streams
[NASA-CASE-LAR-11139-1] c35 N74-32878
- SUPERSONIC INLETS**
- Airflow control system for supersonic inlets
[NASA-CASE-LEW-11188-1] c02 N74-20646
- Shock position sensor for supersonic inlets --- measuring pressure in the throat of a supersonic inlet
[NASA-CASE-LEW-11915-1] c35 N76-14431
- SUPERSONIC NOZZLES**
- Pen-shaped, supersonic exhaust nozzle design
[NASA-CASE-XLE-00057] c28 N70-38711
- Telescoping-spike supersonic nozzle for turbojet or ramjet engines
[NASA-CASE-XLE-00005] c28 N70-39899
- Electric arc heater with supersonic nozzle and fixed arc length for use in high temperature wind tunnels
[NASA-CASE-XAC-01677] c09 N71-20816
- SUPERSONIC SPEEDS**
- Continuous operation, single phased, induction plasma accelerator producing supersonic speeds
[NASA-CASE-XLA-01354] c25 N70-36946
- Static pressure probe
[NASA-CASE-LAR-11552-1] c35 N76-14429
- SUPERSONIC TRANSPORTS**
- Position locating system for remote aircraft using voice communication and digital signals
[NASA-CASE-GSC-10087-2] c21 N71-13958
- Traffic control system for supersonic transports using synchronous satellite for data relay between vehicles and ground station
[NASA-CASE-GSC-10087-1] c02 N71-19287
- System and method for position locating for air traffic control involving supersonic transports
[NASA-CASE-GSC-10087-3] c07 N72-12080
- Doppler compensated communication system for locating supersonic transport position
[NASA-CASE-GSC-10087-4] c07 N73-20174
- Supersonic transport --- aircraft design
[NASA-CASE-LAR-11932-1] c05 N76-31219
- SUPPORT INTERFERENCE**
- Spherical bearing
[NASA-CASE-MFS-23447-1] c37 N77-11403
- SUPPORT SYSTEMS**
- Hydraulic support apparatus for dynamic testing of space vehicles under near-free flight conditions
[NASA-CASE-IXF-03248] c11 N71-10604
- Supporting structure for simultaneous exposure of pellets to X rays
[NASA-CASE-IXP-06031] c15 N71-15606
- Multilegged support system for wind tunnel test models subjected to thermal dynamic loading
[NASA-CASE-XLA-01326] c11 N71-21481
- Adjustable support device with jacket screw for altering distance between base and supported member
[NASA-CASE-NPO-10721] c15 N72-27484
- Hydrostatic bearing support
[NASA-CASE-LEW-11158-1] c37 N77-28486
- SUPPORTS**
- Support techniques for restraint of slender bodies such as launch vehicles
[NASA-CASE-XLA-02704] c11 N69-21540
- Pneumatic control of telescopic mirror support system
[NASA-CASE-XLA-03271] c11 N69-24321
- Optical scanner mounted on rotating support structure with method of compensating for image or satellite rotation
[NASA-CASE-IGS-02401] c14 N69-27485
- Support for flexible conductor cable between drawers or racks holding electronic equipment and cabinet assembly housing drawers or racks
[NASA-CASE-IXF-07587] c15 N71-18701
- Swivel support for gas bearing for position adjustment between ball and supporting cup
[NASA-CASE-IXF-07808] c15 N71-23812

- Tracking mount for laser telescope employed in tracking large rockets and space vehicles to give information regarding azimuth and elevation [NASA-CASE-MFS-14017] c14 N71-26627
- Gas bearing for model support with capacity for measuring angular displacement of model in bearing [NASA-CASE-XIA-09346] c15 N71-28740
- Adjustable rigid mount for trihedral mirror formed of alloy with small coefficient of thermal expansion supporting screws and spring-biased plates [NASA-CASE-XNF-08907] c23 N71-29123
- Slotted fine-adjustment support for optical devices [NASA-CASE-MFS-20249] c15 N72-11386
- Base support for expandable and contractible coupling between two members [NASA-CASE-NFO-11059] c15 N72-17454
- Optical mirror support system [NASA-CASE-XER-07896-2] c23 N72-22673
- Fixture for supporting articles during vibration tests comprising integral annular unit [NASA-CASE-MFS-20523] c14 N72-27412
- Design and development of test stand system for supporting test items in vacuum chamber [NASA-CASE-MFS-21362] c11 N73-20267
- Collapsible support for antenna reflector applied to installation of spacecraft antennas [NASA-CASE-NFO-11751] c07 N73-24176
- Method of making porous conductive supports for electrodes, --- by electroforming and stacking nickel foils [NASA-CASE-GSC-11367-1] c44 N74-19692
- Thrust-isolating mounting --- characteristics of support for loads mounted in spacecraft [NASA-CASE-MFS-21680-1] c18 N74-27397
- Locking mechanism for orthopedic braces [NASA-CASE-GSC-12082-2] c52 N77-27694
- SUPPRESSORS**
- Electronic background suppression field scanning sensor for detecting point source targets [NASA-CASE-XGS-05211] c07 N69-39980
- SURFACE ACOUSTIC WAVE DEVICES**
- Distributed feedback acoustic surface wave oscillator [NASA-CASE-NFO-13673-1] c71 N77-26919
- SURFACE DEFECTS**
- Surface defect detection by reflected microwave radiation pattern [NASA-CASE-ARC-10009-1] c15 N71-17822
- Method and device for detection of surface discontinuities or defects [NASA-CASE-MSC-14187-1] c35 N74-32879
- SURFACE DIFFUSION**
- Metallic film diffusion into metal or ceramic surfaces for boundary lubrication in aerospace environments [NASA-CASE-XLE-01765] c18 N71-10772
- SURFACE FINISHING**
- Development of procedure for producing thin transparent films of zinc oxide on transparent refractory substrate [NASA-CASE-FRC-10019] c15 N73-12487
- Device and method for determining X ray reflection efficiency, scattering properties, and surface finish of optical surfaces [NASA-CASE-MFS-20243] c23 N73-13662
- Solar cell surface treatment [NASA-CASE-LFW-11330-1] c44 N76-14612
- Solar cell surface treatment [NASA-CASE-LFW-11330-2] c44 N76-33624
- Surface finishing --- for aircraft wings [NASA-CASE-MSC-12631-1] c24 N77-28225
- Surface finishing --- of metal airfoils by adhesive bonding [NASA-CASE-MSC-12631-2] c05 N77-31131
- SURFACE IONIZATION**
- Electrodes having array of small surfaces for field ionization [NASA-CASE-ERC-10013] c09 N71-26678
- Development of method and apparatus for detecting surface ions on silicon diodes and transistors [NASA-CASE-ERC-10325] c15 N72-25457
- SURFACE LAYERS**
- Bismuth and lead surface coatings for gas bearings in aerospace engineering [NASA-CASE-XGS-02011] c15 N71-20739
- Method and apparatus for stable silicon dioxide layers on silicon grown in silicon nitride ambient [NASA-CASE-ERC-10073-1] c24 N74-19769
- SURFACE PROPERTIES**
- Anti-wettable materials brazing processes using titanium and zirconium for surface pretreatment [NASA-CASE-XMS-03537] c15 N69-21471
- Ablation article and surface for analyzing flow transition on ablative surface [NASA-CASE-IAR-10439-1] c33 N73-27796
- Dual measurement ablation sensor [NASA-CASE-LAB-10105-1] c34 N74-15652
- Apparatus for scanning the surface of a cylindrical body [NASA-CASE-NFO-11861-1] c36 N74-20009
- Apparatus for microbiological sampling --- including automatic swabbing [NASA-CASE-LAB-11069-1] c35 N75-12272
- Device for measuring the contour of a surface [NASA-CASE-LAB-11869-1] c35 N77-10497
- Penetrometer --- for determining load bearing characteristics of inclined surfaces [NASA-CASE-NFO-11103-1] c35 N77-27367
- Bearing material [NASA-CASE-LFW-11930-3] c24 N77-32249
- SURFACE REACTIONS**
- Chemical spot test for identifying magnesium or magnesium alloys used in aerospace applications [NASA-CASE-LAB-10953-1] c17 N73-27446
- SURFACE ROUGHNESS**
- Roughness detector for recording surface pattern of irregularities [NASA-CASE-XLA-00203] c14 N70-34161
- Optical apparatus for visual detection of roundness and regularity of cone surfaces [NASA-CASE-XNF-00462] c14 N70-34298
- Describing device for surveying contour of surface using X-Y plotter and traveling transducer [NASA-CASE-XLA-08646] c14 N71-17586
- Surface roughness measuring system [NASA-CASE-NFO-13862-1] c32 N77-17325
- SURFACE ROUGHNESS EFFECTS**
- Aerodynamically stable meteorological balloon using surface roughness effect [NASA-CASE-XNF-04163] c02 N71-23007
- SURFACE VEHICLES**
- Optimal control system for automatic speed regulation of electric driven motor vehicle [NASA-CASE-NFO-11210] c11 N72-20244
- Self-propelled vehicle with wheel, track laying, and walking capability for exploratory exploration [NASA-CASE-NFO-11366] c11 N73-26238
- Short range laser obstacle detector --- for surface vehicles using laser diode array [NASA-CASE-NFO-11856-1] c36 N74-15145
- Vehicle locating system utilizing AM broadcasting station carriers [NASA-CASE-NFO-13217-1] c32 N75-26194
- An improved vehicular impact absorption system [NASA-CASE-NFO-14014-1] c37 N77-31501
- SURFACE WAVES**
- Development of method for suppressing excitation of electromagnetic surface waves on dielectric converter antenna [NASA-CASE-XLA-10772] c07 N71-28980
- SURFACES**
- Techniques for recovery of multistage rocket vehicles by providing lifting surfaces on individual sections [NASA-CASE-XNF-00389] c31 N70-34176
- Kinetic and static friction force measurement between magnetic tape and magnetic head surfaces [NASA-CASE-XNF-08680] c14 N71-22995
- Three-axis adjustable loading structure [NASA-CASE-FRC-10051-1] c35 N74-13129
- SURGERY**
- Intra-ocular pressure normalization apparatus [NASA-CASE-LFW-12955-1] c52 N77-30736
- Intra-ocular pressure normalization technique and equipment [NASA-CASE-LFW-12723-1] c52 N77-30737
- SURGES**
- Silicon controlled rectifier inverter with compensation of transients to avoid false gating [NASA-CASE-XLA-08507] c09 N69-39984

- Turn on current transient limiter for
controlling peak current flow in high capacity
load
[NASA-CASE-GSC-10413] c10 N71-26531
- SURGICAL INSTRUMENTS**
Ultrasonic device for ophthalmic eye surgery
with safe removal of macerated material
[NASA-CASE-LEW-11669-1] c05 N73-27062
Ophthalmic liquifaction pump
[NASA-CASE-LEW-12051-1] c52 N75-33640
Improved tissue macerating instrument ---
ophthalmic liquifaction pump
[NASA-CASE-LEW-12668-1] c52 N76-23837
- SURVIVAL EQUIPMENT**
Survival couch for aircraft or spacecraft crews
[NASA-CASE-XLA-00118] c05 N70-33285
Lightweight life preserver without fastening
devices
[NASA-CASE-XMS-06864] c05 N70-36493
Pliable frame for sunglasses in emergency
survival kits
[NASA-CASE-XMS-06064] c05 N71-23096
- SUSPENDING (HANGING)**
Parallel motion suspension device for measuring
instruments
[NASA-CASE-XNP-01567] c15 N70-41310
Cable suspension and inclined walkway system for
simulating reduced or zero gravity environments
[NASA-CASE-XLA-01787] c11 N71-16028
Suspended mass oscillation damper based on
impact energy absorption for damping wind
induced oscillations of tall stacks, antennas,
and umbilical towers
[NASA-CASE-LAR-10193-1] c15 N71-27146
- SUSPENDING (HIXING)**
A 2 degree/90 degree laboratory scattering
photometer
[NASA-CASE-GSC-12088-1] c35 N76-17369
- SWEAT COOLING**
Transpiration cooled turbine blade made from
metallic or ceramic wires
[NASA-CASE-XLE-00020] c15 N70-33226
Transpirationally cooled heat ablation system
for interplanetary spacecraft reentry shielding
[NASA-CASE-XMS-02677] c31 N70-42075
Method of electroforming a rocket chamber
[NASA-CASE-LEW-11118-1] c20 N74-32919
- SWEEP CIRCUITS**
Transistorized circuit for producing multiple
slope voltage sweep
[NASA-CASE-XMS-03542] c09 N71-28926
- SWEEP EFFECT**
Supersonic or hypersonic vehicle control system
comprising elevons with hinge line sweep and
free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088
- SWELLING**
Para-benzoquinone dioxide and concentrated
mineral acid processed to yield intumescent or
fire resistant, heat insulating materials
[NASA-CASE-ARC-10304-1] c18 N73-26572
- SWEEP WINGS**
Design of supersonic aircraft with novel fixed,
swept wing planform
[NASA-CASE-XLA-04451] c02 N71-12243
Acoustically swept rotor
[NASA-CASE-ARC-11106-1] c05 N77-31130
- SWIRLING**
Slosh and swirl alleviator for liquid propellant
tanks during transport and flight
[NASA-CASE-XLA-05749] c15 N71-19569
Swirl can, full-annulus combustion chambers for
high performance gas turbine engines
[NASA-CASE-LEW-11326-1] c23 N73-30665
- SWITCHES**
Switching mechanism with energy stored in coil
spring
[NASA-CASE-XGS-00473] c03 N70-38713
Digital memory system with multiple switch cores
for driving each word location
[NASA-CASE-XNP-01466] c10 N71-26434
Radio frequency controlled solid state switch
[NASA-CASE-ARC-10136-1] c09 N72-22202
- SWITCHING CIRCUITS**
Solid state switching circuit design to increase
current capacity of low rated relay contacts
[NASA-CASE-XNP-09228] c09 N69-27500
Power control switching circuit using low
voltage semiconductor controlled rectifiers
for high voltage isolation
[NASA-CASE-XNP-02713] c10 N69-39888
Selective gold diffusion on monolithic silicon
chips for switching and nonswitching amplifier
devices and circuits and linear and digital
logic circuits
[NASA-CASE-ZRC-10072] c09 N70-11148
Electrical power system for space flight
vehicles operating over extended periods
[NASA-CASE-XNP-00517] c03 N70-34157
High speed low level voltage commutating switch
[NASA-CASE-XAC-00060] c09 N70-39915
Switching circuit with regeneratively connected
transistors eliminating power consumption when
not in use
[NASA-CASE-XNP-02654] c10 N70-42032
Using electron beam switching for brushless
motor commutation
[NASA-CASE-XGS-01451] c09 N71-10677
Increasing power conversion efficiency of
electronic amplifiers by power supply switching
[NASA-CASE-XMS-00945] c09 N71-10798
Silicon controlled rectifier pulse gate
amplifier for blocking false gating caused by
negative transient voltages
[NASA-CASE-XLA-07497] c09 N71-12514
Describing magnetic core current switching
device for steering bipolar current pulses to
memory units
[NASA-CASE-NFO-10201] c08 N71-18694
Transistorized dc-coupled multivibrator with
noninverted output signal
[NASA-CASE-XNE-09450] c10 N71-18723
Reversible current directing circuitry for
reversible motor control
[NASA-CASE-XLA-09371] c10 N71-18724
Constructing Exclusive-Or digital logic circuit
in single module
[NASA-CASE-XLA-07732] c08 N71-18751
Polarization diversity monopulse tracking
receiver design without radio frequency switches
[NASA-CASE-XGS-03501] c09 N71-20864
Sight switch using infrared source and sensor
mounted beside eye
[NASA-CASE-XNP-03934] c09 N71-22985
Complementary regenerative transistorized switch
circuit employing positive and negative feedback
[NASA-CASE-XGS-02751] c09 N71-23015
Reliable magnetic core circuit apparatus with
application in selection matrices for digital
memories
[NASA-CASE-XNP-01318] c10 N71-23033
Electric circuit for producing high current
pulse having fast rise and fall time
[NASA-CASE-XMS-04919] c09 N71-23270
Electric circuit for reversing direction of
current flow
[NASA-CASE-XNP-00952] c10 N71-23271
Switching series regulator with gating control
network
[NASA-CASE-XMS-09352] c09 N71-23316
Microwave waveguide switch with rotor position
control
[NASA-CASE-XNP-06507] c09 N71-23548
Signaling summary alarm circuit with
semiconductor switch for faulty contact
indications
[NASA-CASE-XLE-03061-1] c10 N71-24798
Solid state circuit for switching alternating
current input signal as function of direct
current gating transistor
[NASA-CASE-XNP-06505] c10 N71-24799
Inverters for changing direct current to
alternating current
[NASA-CASE-XGS-06226] c10 N71-25950
Design and development of multistage current
steering switch with inductively coupled
magnetic cores
[NASA-CASE-XNP-08567] c09 N71-26000
Pulse duration control device for driving slow
response time loads in selected sequence
including switching and delay circuits and
magnetic storage
[NASA-CASE-XGS-04224] c10 N71-26418
Turn on current transient limiter for
controlling peak current flow in high capacity
load
[NASA-CASE-GSC-10413] c10 N71-26531

- Input radio frequency circuit for switching type absolute temperature measuring radiometer for noise sources
[NASA-CASE-ERC-11020] c14 N71-26774
- Inverter drive circuit for semiconductor switch
[NASA-CASE-LZW-10233] c10 N71-27126
- Phase locked demodulator with bandwidth switching amplifier circuit
[NASA-CASE-XNP-01107] c10 N71-28859
- Monostable multivibrator for producing output pulse widths with positive feedback NOR gates
[NASA-CASE-MS-13492-1] c10 N71-28860
- Digital magnetic core memory with sensing amplifier circuits
[NASA-CASE-XNP-01012] c08 N71-28925
- Current regulating voltage divider design with load current shunting
[NASA-CASE-MFS-20935] c09 N71-34212
- Relay controlled voltage switching unit for scanning circuitry of star tracker
[NASA-CASE-NPO-11253] c09 N72-17157
- Spacecraft solar cell system with switching circuit to provide compensation for environmental changes
[NASA-CASE-GSC-10669-1] c03 N72-20031
- Flow rate switch for detecting variations in fluid flow velocity through conduits of pressurized systems
[NASA-CASE-NPO-10722] c09 N72-20199
- Switching type voltage regulator with relatively simple circuit arrangement
[NASA-CASE-LZW-11005-1] c09 N72-21243
- Development and characteristics of data multiplexer circuit using field effect transistors arranged in tree switching configuration
[NASA-CASE-NPO-11333] c08 N72-22162
- Pulse coupling circuit with switch between generator and winding
[NASA-CASE-LZW-10433-1] c09 N72-22197
- Solid state remote circuit selector switching circuit
[NASA-CASE-LZW-10387] c09 N72-22201
- Pressure operated electrical switch responsive to pressure decrease after pressure increase
[NASA-CASE-LAR-10137-1] c09 N72-22204
- Transistorized switching logic circuits with tunnel diodes
[NASA-CASE-GSC-10878-1] c10 N72-22236
- Switching circuit for control of cathode ray tube beam with fast rise time for output signal
[NASA-CASE-KSC-10647-1] c10 N72-31273
- Electronic video editor for switching video input signals to common output channel
[NASA-CASE-KSC-10003] c10 N73-13235
- Solid state switch for variable circuit switching
[NASA-CASE-NPO-10817-1] c08 N73-30135
- Transparent switchboard which permits optical display devices to be adapted for use in man machine communications
[NASA-CASE-MS-13746-1] c10 N73-32143
- High isolation RF signal selection switches
[NASA-CASE-NPO-13081-1] c33 N74-22814
- Isolated output system for a class D switching-mode amplifier
[NASA-CASE-MFS-21616-1] c33 N75-30429
- Dual digital video switcher
[NASA-CASE-KSC-10782-1] c33 N75-30431
- Multi-computer multiple data path hardware exchange system
[NASA-CASE-NPO-13422-1] c60 N76-14818
- Window comparator
[NASA-CASE-FRC-10090-1] c33 N77-11296
- Sustained arc ignition system
[NASA-CASE-LZW-12444-1] c33 N77-28385
- Dual mode solid state power switch
[NASA-CASE-MFS-22880-2] c33 N77-31407
- SWITCHING THEORY**
- Multiple circuit switch apparatus requiring minimum hand and eye movement by operator
[NASA-CASE-XAC-03777] c10 N71-15909
- Magnetic tape head function switching system
[NASA-CASE-GSC-11956-1] c35 N75-25134
- SWIVELS**
- Swivel support for gas bearing for position adjustment between ball and supporting cup
[NASA-CASE-IMP-07808] c15 N71-23812
- SYNCHRONISM**
- Synchronizing apparatus for multi-access satellite time division multiplex system
[NASA-CASE-XGS-05918] c07 N69-39974
- Circuitry for generating sync signals in FM communication systems including video information
[NASA-CASE-XNP-10830] c07 N71-11281
- Development of method for synchronizing clocks at several ground stations based on signals received from spacecraft or satellites
[NASA-CASE-XNP-08875] c10 N71-23099
- Pulse generator for synchronizing or resetting electronic signals without requiring separate external source
[NASA-CASE-XGS-03632] c09 N71-23311
- Time synchronization system for synchronizing clocks at remote locations with master clock using moon reflected coded signals
[NASA-CASE-NPO-10143] c10 N71-26326
- System designed to reduce time required for obtaining synchronization in data communication with spacecraft utilizing pseudonoise codes
[NASA-CASE-NPO-10214] c10 N71-26577
- SYNCHRONIZED OSCILLATORS**
- Development of phase demodulation system with two phase locked loops
[NASA-CASE-XNP-00777] c10 N71-19469
- Phase locked phase modulation system with voltage controlled oscillator for final phase linearity
[NASA-CASE-XNP-05382] c10 N71-23544
- Automatic frequency control device for providing frequency reference for voltage controlled oscillator
[NASA-CASE-KSC-10393] c09 N72-21247
- SYNCHRONIZERS**
- Development and characteristics of burst synchronization detection system
[NASA-CASE-XMS-05605-1] c10 N71-19468
- Time division relay synchronizer with master sync pulse for activating binary counter to produce signal identifying time slot for station
[NASA-CASE-GSC-10373-1] c07 N71-19773
- Design and development of synchronous servo loop control system
[NASA-CASE-XNP-03744] c10 N71-20448
- Digital synchronizer for extracting binary data in receiver of PSK/PCM communication system
[NASA-CASE-NPO-10851] c07 N71-24613
- Video sync processor with phase locked system
[NASA-CASE-KSC-10002] c10 N71-25865
- Pulse code modulated signal synchronizer
[NASA-CASE-MS-12462-1] c32 N74-20809
- Pulse code modulated signal synchronizer
[NASA-CASE-MS-12494-1] c32 N74-20810
- System for generating timing and control signals
[NASA-CASE-NPO-13125-1] c33 N75-19519
- Telemetry synchronizer
[NASA-CASE-GSC-11868-1] c17 N76-22245
- SYNCHRONOUS MOTORS**
- Synchronous dc direct-drive system comprising multiple-loop hybrid control system controlling load directly connected to actuator
[NASA-CASE-GSC-10065-1] c10 N71-27136
- Motor run-up system --- power lines
[NASA-CASE-NPO-13374-1] c33 N75-19524
- SYNCHRONOUS SATELLITES**
- Position locating system for remote aircraft using voice communication and digital signals
[NASA-CASE-GSC-10087-2] c21 N71-13958
- Serrodyne traveling wave tube reentrant amplifier for synchronous communication satellites operating at microwave frequencies
[NASA-CASE-XGS-01022] c07 N71-16088
- Traffic control system for supersonic transports using synchronous satellite for data relay between vehicles and ground station
[NASA-CASE-GSC-10087-1] c02 N71-19287
- Tracking antenna system with array for synchronous satellite or ground based radar
[NASA-CASE-GSC-10553-1] c07 N71-19854
- Satellite network synchronization system with multiple access to multiplex repeater
[NASA-CASE-GSC-10390-1] c07 N72-11149
- Development of device for simulating charge and discharge cycle of battery in synchronous orbit
[NASA-CASE-GSC-11211-1] c03 N72-25020
- Camera arrangement --- for satellite scanning of earth or sky

- [NASA-CASE-GSC-12032-2] c35 N76-19408
Systems and methods for determining radio frequency interference
[NASA-CASE-GSC-12150-1] c32 N77-12247
- SYNTHESIS**
Synthesis of polymeric schiff bases by schiff-base exchange reactions
[NASA-CASE-XMF-08651] c06 N71-11236
Preparation of ordered poly(arylenesiloxane)/polymers
[NASA-CASE-XMF-10753] c06 N71-11237
Synthesis and chemical properties of imidazopyrrolone/imide copolymers
[NASA-CASE-XLA-08802] c06 N71-11238
Stable polyimide synthesis from mixtures of monomeric diamines and polycarboxylic acid esters
[NASA-CASE-LEW-11325-1] c06 N73-27980
- SYNTHESIZERS**
Digitally controlled frequency synthesizer for pulse frequency modulation telemetry systems
[NASA-CASE-XGS-02317] c09 N71-23525
- SYNTHETIC FIBERS**
Manufacture of fluid containers from fused coated polyester sheets having resealable septum
[NASA-CASE-NPO-10123] c15 N71-24835
Structure of fabric layers for micrometeoroid protection garment with capability for eliminating heat shorts for use in manufacturing space suits
[NASA-CASE-MSC-12109] c18 N71-26285
Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
[NASA-CASE-XNP-08881] c17 N71-28747
Composite lamination method --- of resin impregnated fiber tape
[NASA-CASE-LAR-12019-1] c24 N77-22179
- SYNTHETIC RESINS**
Process permitting application of synthetic resin coating to irregular-shaped objects at ambient temperature
[NASA-CASE-XNP-06508] c18 N69-39895
- SYSTEM FAILURES**
Tape recorder designed for low power consumption and resistance to operational failure under high stress conditions
[NASA-CASE-XGS-08259] c14 N71-23698
Fault tolerant clock apparatus utilizing a controlled minority of clock elements
[NASA-CASE-MSC-12531-1] c35 N75-30504
- SYSTEMS ANALYSIS**
Analog to digital converter analyzing system
[NASA-CASE-NPO-10560] c08 N72-22166
- SYSTEMS ENGINEERING**
Design of magnetohydrodynamic induction machine with end poles which produce compensating magnetic fields
[NASA-CASE-XNP-07481] c25 N69-21929
Hovering type flying vehicle design and principle mechanisms for manned or unmanned use
[NASA-CASE-MSC-12111-1] c02 N71-11039
Solar battery with interconnecting means for plural cells
[NASA-CASE-XNP-06506] c03 N71-11050
Transparent polycarbonate resin, shell helmet and latch design for high altitude and space flight
[NASA-CASE-XMS-04935] c05 N71-11190
Design and operation of multi-feed cone Cassegrain antenna
[NASA-CASE-NPO-10539] c07 N71-11285
Method and apparatus for measuring potentials in plasmas
[NASA-CASE-XIE-00821] c25 N71-15650
Design and operation of viscous pendulum damper
[NASA-CASE-XLA-02079] c12 N71-16894
Alarm system design for monitoring one or more relay circuits
[NASA-CASE-XMS-10984-1] c10 N71-19417
Wide range analog data compression system
[NASA-CASE-XGS-02612] c08 N71-19435
Space suit body heat exchanger design composed of thermal conductance yarn and liquid coolant loops
[NASA-CASE-XMS-09571] c05 N71-19439
Silicon radiation detecting probe design for in vivo biomedical use
[NASA-CASE-XMS-01177] c05 N71-19440
Design and operation of high speed binary to decimal conversion system
[NASA-CASE-XGS-01230] c08 N71-19544
Spatter proof evaporant source design for use in vacuum deposition of solid thin films on substrates
[NASA-CASE-XNP-06065] c15 N71-20395
Method and apparatus for fabrication of heat insulating and ablative reentry structure
[NASA-CASE-XMS-02009] c33 N71-20834
Polarization diversity monopulse tracking receiver design without radio frequency switches
[NASA-CASE-XGS-03501] c09 N71-20864
Pneumatic cantilever beams and platform for space erectable structure
[NASA-CASE-XLA-01731] c32 N71-21045
Magnetically opened diaphragm design with camera, shutter and expansion tube applications
[NASA-CASE-XLA-03660] c15 N71-21060
Portable apparatus producing high velocity annular air column surrounding low velocity, filtered, superclean air central core for industrial clean room environmental control
[NASA-CASE-XMF-03212] c15 N71-22721
Rotary spindle lathe attachments for machining geometrical cones
[NASA-CASE-XMS-04292] c15 N71-24722
Apparatus and method for spin forming tubular elbows with high strength, uniform thickness, and close tolerances
[NASA-CASE-XMF-01083] c15 N71-22723
Spacecraft air lock system to provide ingress and egress of astronaut without subjecting vehicular environment to vacuum of space
[NASA-CASE-XLA-02050] c31 N71-22968
Method of stationkeeping for lenticular gravity gradient satellites
[NASA-CASE-XLA-03132] c31 N71-22969
Filler valve design for supplying liquid propellants at high pressure to space vehicles
[NASA-CASE-XNP-01747] c15 N71-23024
Method and apparatus for producing very low temperature refrigeration based on gas pressure balance
[NASA-CASE-XNP-08877] c15 N71-23025
Monitoring circuit design for sampling circuit control and reduction of time-bandwidth in video communication systems
[NASA-CASE-XNP-02791] c07 N71-23026
Multisample test chamber for exposing materials to X rays, temperature change, and gaseous conditions and determination of material effects
[NASA-CASE-XMS-02930] c11 N71-23042
Variable duration pulse integrator design for integrating pulse duration modulated pulses with elimination of ripple content
[NASA-CASE-XLA-01219] c10 N71-23084
Sealed electrochemical cell with flexible casing for varying electrolyte level in cell
[NASA-CASE-XGS-01513] c03 N71-23336
Mosaic semiconductor radiation detector and position indicator systems engineering for low energy particles
[NASA-CASE-XGS-03230] c14 N71-23401
Device for measuring two orthogonal components of force with gallium flotation of measuring target for use in vacuum environments
[NASA-CASE-XAC-04885] c14 N71-23790
Transducer circuit design with single coaxial cable for input and output connections including incorporation into miniaturized catheter transducer
[NASA-CASE-ARC-10132-1] c09 N71-24597
Method of attaching cover glass to silicon solar cell without using adhesive
[NASA-CASE-XLE-08569-2] c03 N71-24681
Development of attitude control system for sounding rocket stabilization during ballistic phase of flight
[NASA-CASE-XGS-01654] c31 N71-24750
Temperature telemetric transmitter with frequency determining tank circuit for short range transmission
[NASA-CASE-NPO-10649] c07 N71-24840
Tuning arrangement for frequency control of magnetron-type electron discharge device
[NASA-CASE-XNP-09771] c09 N71-24841

Broadband modified turnstile antenna for use in space tracking and communications
[NASA-CASE-MSC-12209] c09 N71-24842

Apparatus to determine electric field strength by measuring deflection of electron beam impinging on target
[NASA-CASE-XMF-06617] c09 N71-24843

Binary to decimal decoder logic circuit design with feedback control and display device
[NASA-CASE-XKS-06167] c08 N71-24890

Noninterruptable digital counter circuit design with display device for pulse frequency modulation
[NASA-CASE-XNP-05759] c18 N71-24891

Quick disconnect duct coupling device for single-handed operation
[NASA-CASE-MFS-20395] c15 N71-24903

Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
[NASA-CASE-MFS-20385] c09 N71-24904

Pneumatic mechanism for releasing hook and loop fasteners between large rigid structures
[NASA-CASE-XMS-10660-1] c15 N71-25975

Sealed fluorescent tube light unit capable of connection with other units to form string of work lights
[NASA-CASE-XKS-05932] c09 N71-26787

Apparatus for semiautomatic inspection of microfilmed documents for density, resolution, size, and position
[NASA-CASE-MFS-20240] c14 N71-26788

Method and apparatus for remote measurement of displacement of marks on specimen undergoing tensile test
[NASA-CASE-NFO-10778] c14 N72-11364

Spacecraft solar cell system with switching circuit to provide compensation for environmental changes
[NASA-CASE-GSC-10669-1] c03 N72-20031

Electric storage battery with high impact resistance
[NASA-CASE-NFO-11021] c03 N72-20032

Method and apparatus for providing active attitude control for spacecraft by converting any attitude motion of vehicle into simple rotational motion
[NASA-CASE-HQN-10439] c21 N72-21624

Development of light sensing system for controlled orientation of object relative to sun or other light source
[NASA-CASE-NFO-11311] c14 N72-25414

Development of thrust control system for application to control of aircraft and spacecraft
[NASA-CASE-MSC-13397-1] c21 N72-25595

Development of computer program for estimating reliability of self-repair and fault-tolerant systems with respect to selected system and mission parameters
[NASA-CASE-NFO-13086-1] c15 N73-12495

Design and development of active control system for air cushion vehicle to reduce or eliminate effects of excessive vertical vibratory acceleration
[NASA-CASE-LPR-10531-1] c02 N73-13023

Measurement system for physical quantity represented by or converted to variable frequency signal
[NASA-CASE-MFS-20658-1] c14 N73-30386

Design of precision vertical alignment system using laser with gravitationally sensitive cavity
[NASA-CASE-ARC-10444-1] c16 N73-33397

System for calibrating pressure transducer
[NASA-CASE-LAR-10910-1] c35 N74-13132

Three mirror glancing incidence system for X-ray telescope
[NASA-CASE-MFS-21372-1] c74 N74-27866

Holographic system for nondestructive testing
[NASA-CASE-MFS-21704-1] c35 N75-25124

Improved solar heating system
[NASA-CASE-LAR-12009-1] c44 N76-32649

A non-tracking solar energy collector system
[NASA-CASE-NFO-13813-1] c44 N77-19579

A cantilever mounted resilient pad gas bearing
[NASA-CASE-LFW-12569-1] c37 N77-24496

Compact pulsed laser having improved heat conductance

[NASA-CASE-NFO-13147-1]

c36 N77-25502

T

TACHYMETERS

Digital cardiometer incorporating circuit for measuring heartbeat rate of subject over predetermined portion of one minute also converting rate to beats per minute
[NASA-CASE-XMS-02399] c05 N71-22896

Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
[NASA-CASE-MFS-20385] c09 N71-24904

Development of instantaneous reading tachometer for measuring electrocardiogram signal rate
[NASA-CASE-MFS-20418] c14 N73-24473

Tachometer
[NASA-CASE-MFS-23175-1] c35 N77-30436

TAKEOFF
Aircraft instrument for indicating malfunctions during takeoff
[NASA-CASE-XLA-00100] c14 N70-36807

Aircraft indicator for pilot control of takeoff roll, climbout path and verticle flight path in poor visibility conditions
[NASA-CASE-XLA-00487] c14 N70-40157

TANGENTS
Integrated circuit tangnet function generator
[NASA-CASE-MSC-13907-1] c10 N73-26230

TANK GEOMETRY
Liquid propellant tank design with semitoroidal bulkhead
[NASA-CASE-XMF-01899] c31 N70-41948

TANKS (CONTAINERS)
Radiation source and detection system for measuring amount of liquid inside tanks independently of liquid configuration
[NASA-CASE-MSC-12280] c27 N71-16348

Development of apparatus and method for testing leakage of large tanks
[NASA-CASE-XMF-02392] c32 N71-24285

Design and development of device to prevent clogging in hoppers containing particulate materials
[NASA-CASE-LAR-10961-1] c15 N73-12496

Floating baffle for tank drain
[NASA-CASE-RSC-10639] c15 N73-26472

Method of producing a storage bulb for an atomic hydrogen maser
[NASA-CASE-NFO-13050-1] c36 N75-15029

TANTALUM
Oxygen-doped tantalum emitter for thermionic devices such as cesium vapor diodes
[NASA-CASE-NFO-11138] c03 N70-34646

Arc electrode of graphite with tantalum ball tip
[NASA-CASE-XLE-04788] c09 N71-22987

Organometallic compounds of niobium and tantalum useful for film deposition
[NASA-CASE-XNP-04023] c06 N71-28808

Tantalum modified ferritic iron base alloys --- for use in high temperature environments
[NASA-CASE-LFW-12095-1] c26 N76-17233

Thermocouples of tantalum and rhenium alloys for more stable vacuum-high temperature performance
[NASA-CASE-LFW-12050-1] c35 N77-32454

TANTALUM ALLOYS
Evaporating crucible of tantalum-tungsten foil, nickel alumina bonding agent, and ceramic coating
[NASA-CASE-XLA-03105] c15 N69-27483

TANTALUM CARBIDES
Thermal shock and erosion resistant tantalum carbide ceramic material
[NASA-CASE-LAR-11902-1] c27 N76-23436

TANTALUM OXIDES
Development of thin film temperature sensor from TaO
[NASA-CASE-NFO-11775] c26 N72-28761

TAPE RECORDERS
Plural recorder system which limits signal recording to signals of sufficient interest
[NASA-CASE-XMS-06949] c09 N69-21467

Endless loop tape transport mechanism for driving and tensioning recording medium in magnetic tape recorder
[NASA-CASE-IGS-01223] c07 N71-10609

Development of low friction magnetic recording tape

SUBJECT INDEX

TELEMETRY

- [NASA-CASE-XGS-00373] c23 N71-15978
Tape guidance system for multichannel digital recording system
[NASA-CASE-XNP-09453] c08 N71-19420
Design and development of synchronous servo loop control system
[NASA-CASE-XNP-03744] c10 N71-20448
Development of data storage system for storing digital data in high density format on magnetic tape
[NASA-CASE-XNP-02778] c08 N71-22710
Digital telemetry system apparatus to reduce tape recorder wow and flutter noise during playback
[NASA-CASE-XGS-01812] c07 N71-23001
Tape recorder designed for low power consumption and resistance to operational failure under high stress conditions
[NASA-CASE-XGS-08259] c14 N71-23698
Transient video signal tape recorder with expanded playback
[NASA-CASE-ARC-10003-1] c09 N71-25866
Closed loop servosystem for variable speed tape recorders onboard spacecraft
[NASA-CASE-NPO-10700] c07 N71-33613
Design and characteristics of recording system for selective reprocessing and filtering of data to obtain optimum signal to noise ratios
[NASA-CASE-ERC-10112] c07 N72-21119
Video tape recorder with scan conversion playback for color television signals
[NASA-CASE-NPO-10166-1] c07 N73-22076
Magnetic tape head function switching system
[NASA-CASE-GSC-11956-1] c35 N75-25134
Scan converting video tape recorder
[NASA-CASE-NPO-10166-2] c35 N76-16391
Method of and means for testing a tape record/playback system
[NASA-CASE-MFS-22671-2] c35 N77-17426
- TAPERED COLUMNS**
Method for shaping regeneratively cooled rocket motor casing having minimum thickness at each channel cross section
[NASA-CASE-XIX-00409] c28 N71-15658
Regeneratively cooled rocket motor casing with tapered channels to insure minimum thicknesses at each channel cross section for necessary strength requirements
[NASA-CASE-XIX-05689] c28 N71-15659
- TARGET ACQUISITION**
Acquisition and tracking system for optical radar
[NASA-CASE-MFS-20125] c16 N72-13437
Target acquisition antenna feed with reflector system
[NASA-CASE-GSC-10064-1] c10 N72-22235
Development of electronic detection system for remotely determining number and movement of enemy personnel
[NASA-CASE-ARC-10097-2] c07 N73-25160
- TARGET RECOGNITION**
Electronic background suppression field scanning sensor for detecting point source targets
[NASA-CASE-XGS-05211] c07 N69-39980
- TARGET SIMULATORS**
Simulator for practicing the mating of an observer-controlled object with a target
[NASA-CASE-MFS-23052-2] c14 N77-18179
- TECHNOLOGY TRANSFER**
Stator rotor tools
[NASA-CASE-MSC-16000-1] c07 N77-13062
- TECHNOLOGY UTILIZATION**
Nozzle extraction process and handlemeter for measuring handle
[NASA-CASE-LAR-12147-1] c27 N77-10198
Rotary leveling base platform
[NASA-CASE-ARC-1C981-1] c35 N77-10498
Two wavelength double pulse tunable dye laser
[NASA-CASE-LAR-12012-1] c36 N77-10517
Apparatus and method for reducing thermal stress in a turbine rotor
[NASA-CASE-LRW-12232-1] c07 N77-18160
Sequencing device utilizing planetary gear set
[NASA-CASE-MSC-19514-1] c37 N77-19459
Collapsible corrugated horn antenna
[NASA-CASE-LAR-11745-1] c32 N77-24339
- TEFLON (TETRAFLUOROETHYLENE)**
Reinforced FEP Teflon composite material diffusion bonded to metal substrate
[NASA-CASE-MFS-20482] c15 N72-22492
- Method of producing a storage bulb for an atomic hydrogen maser
[NASA-CASE-NFO-13050-1] c36 N75-15029
Lead-oxygen dc power supply system having a closed loop oxygen and water system
[NASA-CASE-MFS-23059-1] c44 N76-27664
- TELECOMMUNICATION**
Adaptive compression signal processor for PCM communication systems
[NASA-CASE-XLA-03076] c07 N71-11266
Circuitry for generating sync signals in FM communication systems including video information
[NASA-CASE-XNP-10830] c07 N71-11281
Automatic estimation of signal to noise ratio and other parameters in signal communication systems
[NASA-CASE-XNF-05254] c07 N71-20791
Digital synchronizer for extracting binary data in receiver of PSK/PCM communication system
[NASA-CASE-NFO-10851] c07 N71-24613
Encoders designed to generate comma free biorthogonal Reed-Muller type code comprising conversion of 64 6-bit words into 64 32-bit data for communication purposes
[NASA-CASE-NPO-10595] c10 N71-25917
Multicarrier communications system for transmitting modulated signals from single transmitter
[NASA-CASE-NFO-11548] c07 N73-26118
Synchronized digital communication system
[NASA-CASE-XNF-03623] c09 N73-28084
Coherent receiver employing nonlinear coherence detection for carrier tracking
[NASA-CASE-NFO-11921-1] c32 N74-30523
Pseudo-noise test set for communication system evaluation --- test signals
[NASA-CASE-MFS-22671-1] c35 N75-21582
Modulator for tone and binary signals --- phase of modulation of tone and binary signals on carrier waves in communication systems
[NASA-CASE-GSC-11743-1] c32 N75-24981
Receiving and tracking phase modulated signals
[NASA-CASE-MSC-16170-1] c32 N77-12248
- TELEMETRY**
Fabrication of pressure-telemetry transducers
[NASA-CASE-XNF-09752] c14 N69-21541
Telemetry data unit to form multibit words for use between demodulator and computer
[NASA-CASE-XNF-09225] c09 N69-24333
Development of telemetry system for position location and data acquisition
[NASA-CASE-GSC-10083-1] c30 N71-16090
Telespectrograph for analyzing upper atmosphere by tracking bodies reentering atmosphere at high velocities
[NASA-CASE-XLA-03273] c14 N71-18699
Digitally controlled frequency synthesizer for pulse frequency modulation telemetry systems
[NASA-CASE-XGS-02317] c09 N71-23525
Time division multiplexed telemetry transmitting system controlled by programmed memory
[NASA-CASE-GSC-10131-1] c07 N71-24624
Temperature telemetric transmitter with frequency determining tank circuit for short range transmission
[NASA-CASE-NFO-10649] c07 N71-24840
System designed to reduce time required for obtaining synchronization in data communication with spacecraft utilizing pseudonoise codes
[NASA-CASE-NFO-10214] c10 N71-26577
Zero power telemetry actuated switch for biomedical equipment
[NASA-CASE-ARC-10105] c09 N72-17153
Development and characteristics of telemetry system using computer-accessed circuits and remotely controlled from ground station
[NASA-CASE-NFO-11358] c07 N72-25172
Control and information system for digital telemetry data using analog converter to digitize sensed parameter values
[NASA-CASE-NFO-11016] c08 N72-31226
Characteristics of two channel telemetry system with two data rate channels for high and low data rate communication
[NASA-CASE-NFO-11572] c07 N73-16121
Telemetry and transmission system with programmed sampling and multiplexing

[NASA-CASE-GSC-11388-1] cC7 N73-24187
Improved phase lock loop for receiver in
multichannel teleretry system with suppressed
carrier
[NASA-CASE-NFO-11593-1] c07 N73-28012
Teleretry synchronizer
[NASA-CASE-GSC-11868-1] c17 N76-22245

TELEOPERATORS
Cooperative multiaxis sensor for teleoperation
of article manipulating apparatus
[NASA-CASE-NFO-13386-1] c54 N75-27758

TELEPHONY
Digital communication system
[NASA-CASE-MSC-13912-1] c32 N74-30524

TELESCOPES
Pneumatic control of telescopic mirror support
system
[NASA-CASE-XIA-03271] c11 N69-24321
Tracking mount for laser telescope employed in
tracking large rockets and space vehicles to
give information regarding azimuth and elevation
[NASA-CASE-MFS-14017] c14 N71-26627
Development of reflector system for application
to line-of-sight pointing and tracking
telescopes
[NASA-CASE-NFO-10468] c23 N71-33229
Design and development of light sensing device
for controlling orientation of object relative
to sun or other light source
[NASA-CASE-NFO-11201] c14 N72-27409
Boreoscope with adjustable hinged telescoping
optical system
[NASA-CASE-MFS-15162] c14 N72-32452
Ritchey-Chretien telescope responsive to images
located off telescope optical axis
[NASA-CASE-GSC-11487-1] c14 N73-30393
Servo-controlled intravital microscope system
[NASA-CASE-NFO-13214-1] c35 N75-25123

TELETYPEWRITER SYSTEMS
Teletypewriter video communication system and
apparatus
[NASA-CASE-XNP-06611] c07 N71-26102

TELEVISION CAMERAS
Electrically operated rotary shutter for
television camera aboard spacecraft
[NASA-CASE-XNP-00637] c14 N70-40273
TV camera output signal control system for
digital spacecraft communication
[NASA-CASE-XNP-01472] c14 N70-41807
Solid state television camera system consisting
of monolithic semiconductor mosaic sensor and
molecular digital readout systems
[NASA-CASE-XNP-06092] c07 N71-24612
Color television system for allowing nonchrome
television camera to produce color pictures
[NASA-CASE-MSC-12146-1] c07 N72-17109
Optical conversion method
[NASA-CASE-MSC-12618-1] c74 N76-18917
TV fatigue crack monitoring system
[NASA-CASE-LAR-11490-1] c35 N76-28530

TELEVISION EQUIPMENT
Conversion system for transforming slow scan
rate of Apollo TV camera on moon to fast scan
of commercial TV
[NASA-CASE-XMS-07168] c07 N71-11300
Automatic closed circuit television arc guidance
control for welding joints
[NASA-CASE-MFS-13046] c07 N71-19433
Color television system utilizing single gun
current sensitive cclcr cathode ray tube
[NASA-CASE-ERC-10098] c09 N71-28618
Television multiplexing system, using single
crystal controlled clock for signal
synchronization
[NASA-CASE-KSC-10654-1] c07 N73-30115
Rotating raster generator
[NASA-CASE-FRC-10071-1] c32 N74-20813
Auditory display for the blind
[NASA-CASE-BQN-10832-1] c71 N74-21014
Spacecraft docking and alignment system ---
using television camera system
[NASA-CASE-MSC-12559-1] c18 N76-14186
System for producing chroma signals
[NASA-CASE-MSC-14683-1] c74 N77-18893

TELEVISION RECEIVERS
Improvements in receiver of narrow bandwidth
television system
[NASA-CASE-XMS-06740-1] c07 N71-26579

TELEVISION SYSTEMS

Electron beam scanning system for improved image
definition and reduced power requirements for
video signal transmission
[NASA-CASE-ERC-10552] c09 N71-12539
Development and characteristics of burst
synchronization detection system
[NASA-CASE-XMS-05605-1] c10 N71-19468
Improvements in receiver of narrow bandwidth
television system
[NASA-CASE-XMS-06740-1] c07 N71-26579
Stereoscopic television system, including
projecting pair of binocular images
[NASA-CASE-ABC-10160-1] c23 N72-27728

TELEVISION TRANSMISSION
Television simulation for aircraft and space
flight
[NASA-CASE-XFB-03107] c09 N71-19449
Automatic frequency control for FM transmitter
[NASA-CASE-MFS-21540-1] c32 N74-19790
Television noise reduction device
[NASA-CASE-MSC-12607-1] c32 N75-21485

TEMPER (METALLURGY)
Method of producing complex aluminum alloy parts
of high temper, and products thereof
[NASA-CASE-MSC-19693-1] c26 N76-29401

TEMPERATURE
Fluorinated esters of polycarboxylic acid and
lubricating compositions for use at extreme
temperature
[NASA-CASE-MFS-21040-1] c06 N73-30098

TEMPERATURE COMPENSATION
Temperature compensated solid state differential
amplifier with application in
bioinstrumentation circuits
[NASA-CASE-XAC-00435] c09 N70-35440
Variable frequency magnetic coupled
multivibrator with temperature compensated
frequency control circuit
[NASA-CASE-IGS-00458] c09 N70-38604
Matched thermistors for microwave power meters
with compensation for temperature changes
[NASA-CASE-NFO-10348] c10 N71-12554
Development of temperature compensated thrust
measuring gage for measuring forces as
function of time in environment with varying
temperature
[NASA-CASE-IGS-02319] c14 N71-22965
Variable frequency subcarrier oscillator with
temperature compensation
[NASA-CASE-XNP-03916] c09 N71-28810
Omnidirectional liquid filled accelerometer
design with liquid and housing temperature
compensation
[NASA-CASE-HQN-10780] c14 N71-30265
Development of thermal compensating structure
which maintains uniform length with changes in
temperature
[NASA-CASE-MFS-20433] c15 N72-28496
Development of temperature compensated light
source with components and circuitry for
maintaining luminous intensity independent of
temperature variations
[NASA-CASE-ABC-10467-1] c09 N73-14214
Opto-mechanical subsystem with temperature
compensation through isothermal design
[NASA-CASE-GSC-12059-1] c35 N77-27366

TEMPERATURE CONTROL
Method and apparatus using temperature control
for wavelength tuning of liquid lasers
[NASA-CASE-ERC-10187] c16 N69-31343
Ultraviolet radiation resistant alkali-metal
silicate coatings for temperature control of
spacecraft
[NASA-CASE-XGS-04119] c18 N69-39979
Passive thermal control coating on aluminum foil
laminate for inflatable spacecraft surfaces
[NASA-CASE-XLA-01291] c33 N70-36617
Thermal switch for transferring excess heat from
one region to another heat dissipating one
[NASA-CASE-XNP-00463] c33 N70-36847
Sandwich panel structure for removing heat from
shield between hot and cold areas
[NASA-CASE-XLA-00349] c33 N70-37979
Device for adding water to high velocity exhaust
jets to reduce velocity, noise, and temperature
[NASA-CASE-XNP-01813] c28 N70-41582
Modifying existing solar cells for temperature
control

SUBJECT INDEX

TEMPERATURE MEASURING INSTRUMENTS

[NASA-CASE-NFO-10109] c03 N71-11049
 Temperature sensor warning system for pneumatic
 tires of aircraft and ground vehicles
 [NASA-CASE-XLA-01926] c14 N71-15620
 Intermittent type silica gel adsorption
 refrigerator for providing temperature control
 for spacecraft components
 [NASA-CASE-INP-00920] c15 N71-15906
 Using heat control unit to preheat circulating
 fluid
 [NASA-CASE-INP-04237] c33 N71-16278
 Mounting apparatus for temperature control system
 [NASA-CASE-NFO-10138] c33 N71-16357
 Design and development of device for cooling
 inner conductor of coaxial cable
 [NASA-CASE-INP-05775] c09 N71-20445
 Thermal control wall panel with application to
 spacecraft cabins
 [NASA-CASE-XLA-01243] c33 N71-22792
 Development and characteristics of thermal
 sensitive panel for controlling ratio of solar
 absorptivity to surface emissivity for space
 vehicle temperature control
 [NASA-CASE-XLA-07728] c33 N71-22890
 Method and apparatus for adjusting thermal
 conductance in electronic components for space
 use
 [NASA-CASE-INP-05524] c33 N71-24876
 Device for rapid adjustment and maintenance of
 temperature in electronic components
 [NASA-CASE-INP-02792] c14 N71-28958
 Automatic control device for regulating inlet
 water temperature of liquid cooled spacesuit
 [NASA-CASE-MSC-13917-1] c05 N72-15098
 Development of method for controlling vapor
 content of gas
 [NASA-CASE-NFO-10633] c03 N72-28025
 Atomic hydrogen maser with bulb temperature
 control by output frequency difference signal
 for wall shift elimination
 [NASA-CASE-HQN-10654-1] c16 N73-13489
 Design and development of thermomechanical pump
 for transmitting warming fluid through fluid
 circuit to control temperature of spacecraft
 instrumentation
 [NASA-CASE-NFO-11417] c15 N73-24513
 Automatic temperature control for liquid cooled
 space suit
 [NASA-CASE-ARC-10599-1] c05 N73-26071
 Temperature control system comprised of
 wheatstone bridge with RC circuit
 [NASA-CASE-NFO-11304] c14 N73-26430
 Development and characteristics of thermal
 control system for maintaining constant
 temperature within spacecraft module with wide
 variations of component heat transfer
 [NASA-CASE-GSC-11018-1] c31 N73-30829
 Apparatus for controlling the temperature of
 balloon-borne equipment
 [NASA-CASE-GSC-11620-1] c34 N74-23039
 Self-regulating proportionally controlled
 heating apparatus and technique
 [NASA-CASE-GSC-11752-1] c77 N75-20140
 Rocket chamber and method of making
 [NASA-CASE-LEW-11118-2] c20 N76-14191
 Thermostatically controlled non-tracking type
 solar energy concentrator
 [NASA-CASE-NFO-13497-1] c44 N76-14602
 Magnetic heat pumping
 [NASA-CASE-LEW-12508-2] c34 N77-32435
TEMPERATURE DISTRIBUTION
 Oven for heat treating heat shields
 [NASA-CASE-XNS-04318] c15 N69-27871
TEMPERATURE EFFECTS
 Shock and vibration damping device using
 temperature sensitive solid amorphous polymers
 [NASA-CASE-XAC-11225] c14 N69-27486
 Differential pressure cell insensitive to
 changes in ambient temperature and extreme
 overload
 [NASA-CASE-XAC-00042] c14 N70-34816
 Fluid flow control valve for regulating fluids
 in molecular quantities
 [NASA-CASE-XLE-00703] c15 N71-15967
 Describing device for changing flow rate of
 fluid in duct in response to change in
 temperature
 [NASA-CASE-NFS-14259] c15 N71-19213

Temperature sensitive magnetometer with
 pulsating thermally cycled magnetic core
 [NASA-CASE-XAC-03740] c14 N71-26135
 Development of system with electrical properties
 which vary with changes in temperature for use
 with feedback loop in operational amplifier
 circuit
 [NASA-CASE-MSC-13276-1] c14 N71-27058
TEMPERATURE GRADIENTS
 Differential thermopile for measuring cooling
 water temperature rise
 [NASA-CASE-XAC-00812] c14 N71-15598
 Development of temperature compensated light
 source with components and circuitry for
 maintaining luminous intensity independent of
 temperature variations
 [NASA-CASE-ARC-10467-1] c09 N73-14214
 Method for compression molding of thermosetting
 plastics utilizing a temperature gradient
 across the plastic to cure the article
 [NASA-CASE-LAR-10489-1] c31 N74-18124
 Method and apparatus for checking fire detectors
 [NASA-CASE-GSC-11600-1] c35 N74-21019
TEMPERATURE MEASUREMENT
 Filter arrangement for controlling light
 intensity in motion picture camera used in
 optical pyrometry
 [NASA-CASE-XLA-00062] c14 N70-33254
 Development of apparatus for measuring thermal
 conductivity
 [NASA-CASE-IGS-01052] c14 N71-15992
 Design and characteristics of thermocouples
 consisting of flexible tape for improved
 attachment to temperature source
 [NASA-CASE-INP-01659] c14 N71-23039
 Black body cavity radiometer with thermal
 resistance wire bridge circuit
 [NASA-CASE-INP-08961] c14 N71-24809
 Design, development, and characteristics of
 pressure and temperature sensor operating
 immersed in fluid flow
 [NASA-CASE-LEW-10281-1] c14 N72-17327
 Development of thermocouple instrument for
 measuring temperature of wall heated by
 flowing fluid without disturbing boundary layer
 [NASA-CASE-XLE-05230] c14 N72-27410
 Thermocouple apparatus for measuring wall
 temperatures in regeneratively cooled rocket
 engines having thin walled cooling passages
 [NASA-CASE-XLE-05230-2] c14 N73-13417
 Thermochromic compositions for detecting heat
 levels in electronic circuits and devices
 [NASA-CASE-NFO-10764-1] c14 N73-14428
 Method of fabricating an article with cavities
 --- with thin bottom walls
 [NASA-CASE-LAR-10318-1] c31 N74-18089
 Method for determining thermo-physical
 properties of specimens --- photographic
 recording of changes in thin film phase-change
 temperature indicating material in wind tunnel
 [NASA-CASE-LAR-11053-1] c25 N74-18551
 Wind sensor
 [NASA-CASE-NFO-13462-1] c35 N76-24524
 Miniature ingestible telemeter devices to
 measure deep-body temperature
 [NASA-CASE-ARC-10583-1] c52 N76-29894
TEMPERATURE MEASURING INSTRUMENTS
 Temperature sensor warning system for pneumatic
 tires of aircraft and ground vehicles
 [NASA-CASE-XLA-01926] c14 N71-15620
 Electric network for monitoring temperatures,
 detecting critical temperatures, and
 indicating critical time duration
 [NASA-CASE-INP-01097] c10 N71-16058
 Electromagnetic energy detection by thermal
 sensor with vibrating electrode
 [NASA-CASE-XAC-10768] c09 N71-18830
 Input radio frequency circuit for switching type
 absolute temperature measuring radiometer for
 noise sources
 [NASA-CASE-ERC-11020] c14 N71-26774
 High intensity radiant energy pulse source for
 calibrating heat transfer gages with
 thermoluminescent shutter activation
 [NASA-CASE-ARC-10178-1] c09 N72-17152
 Development of flexible thermocouple in form of
 tape for adaptation to special temperature
 measuring conditions
 [NASA-CASE-LEW-11072-1] c14 N73-24472

- Thermocouples of tantalum and rhenium alloys for more stable vacuum-high temperature performance
[NASA-CASE-LEW-12050-1] c35 N77-32454
- TEMPERATURE PROBES**
- Thermally sensitive tuning probe for nullifying detuning effects in microwave cavity resonator of amplifier
[NASA-CASE-XNP-00449] c14 N70-35220
- Design, development, and characteristics of pressure and temperature sensor operating immersed in fluid flow
[NASA-CASE-LEW-10281-1] c14 N72-17327
- TEMPERATURE SENSORS**
- Miniaturized radiometer for detecting low level thermal radiation
[NASA-CASE-XLA-04556] c14 N69-27484
- Mounting fixture for supporting thermobulb in pipeline
[NASA-CASE-NFO-10158] c33 N71-16356
- Mounting apparatus for temperature control system
[NASA-CASE-NFO-10138] c33 N71-16357
- Heat flux sensor adapted for mounting on aircraft or spacecraft to measure aerodynamic heat flux inflow to aircraft skin
[NASA-CASE-XFR-03802] c33 N71-23085
- Temperature telemetric transmitter with frequency determining tank circuit for short range transmission
[NASA-CASE-NFO-10649] c07 N71-24840
- Black body radiometer design with temperature sensing and cavity heat source cone winding
[NASA-CASE-XNP-05701] c14 N71-26475
- Thin film capacitive bolometer and capacitance temperature interchange sensor
[NASA-CASE-NFO-10607] c09 N71-27232
- Development of thin film temperature sensor from TaO
[NASA-CASE-NFO-11775] c26 N72-28761
- Heat detection and compositions and devices therefor
[NASA-CASE-NFC-1C764-2] c35 N75-25122
- TEMPLATES**
- Precision surface cutter for screen circuit negatives and other microcircuits
[NASA-CASE-XLA-09843] c15 N72-27485
- TENSILE STRENGTH**
- Method for producing fiber reinforced metallic composites with high strength and elasticity over wide temperature range
[NASA-CASE-XLE-00231] c17 N70-38198
- Composites reinforced with short metal fibers or whiskers and having high tensile strength
[NASA-CASE-XLP-00228] c17 N70-38490
- Apparatus for tensile strength testing of specimen by pressurized fluid
[NASA-CASE-XRS-06250] c14 N71-15600
- Process for fiberizing ceramic materials with high fusion temperatures and tensile strength
[NASA-CASE-XNP-00597] c18 N71-23088
- Tensile strength testing device having pulley guides for exerting multiple forces on test specimen
[NASA-CASE-XNP-05634] c15 N71-24834
- Device for use in loading tension members --- characterized by elongated elastic body
[NASA-CASE-NFS-21488-1] c14 N75-24794
- TENSILE STRESS**
- Method for testing rocket nozzles at high tensile stress levels
[NASA-CASE-NFO-10311] c31 N71-15643
- Device for measuring tensile forces
[NASA-CASE-NFS-21728-1] c35 N74-27865
- Solid medium thermal engine
[NASA-CASE-ARC-10461-1] c44 N74-33379
- TENSILE TEST**
- Tensile strength testing device having pulley guides for exerting multiple forces on test specimen
[NASA-CASE-XNP-05634] c15 N71-24834
- TENSILE TESTS**
- Apparatus for tensile strength testing of specimen by pressurized fluid
[NASA-CASE-XRS-06250] c14 N71-15600
- Apparatus for measuring load on cable under static or dynamic conditions comprising pulleys pivoting structure against restraint of tension strap
[NASA-CASE-XRS-04545] c15 N71-22878
- Method and apparatus for remote measurement of displacement of marks on specimen undergoing tensile test
[NASA-CASE-NFO-10778] c14 N72-11364
- Anti-buckling fatigue test assembly --- for subjecting metal specimen to tensile and compressive loads at constant temperature
[NASA-CASE-LAR-10426-1] c09 N74-19528
- Method and apparatus for tensile testing of metal foil
[NASA-CASE-LAR-10208-1] c35 N76-18400
- Device for tensioning test specimens within an hermetically sealed chamber
[NASA-CASE-NFS-23281-1] c35 N77-22450
- TENSION**
- Meter for use in detecting tension in straps having predetermined elastic characteristics
[NASA-CASE-NFS-22189-1] c35 N75-19615
- TERMINAL GUIDANCE**
- Data processing and display system for terminal guidance of X-15 aircraft
[NASA-CASE-XFR-00756] c02 N71-13421
- Terminal guidance system --- for guiding aircraft into preselected altitude and/or heading at terminal point
[NASA-CASE-FRC-10049-1] c04 N74-13420
- TERRAIN**
- Vertically descending flight vehicle landing gear for rough terrain
[NASA-CASE-XNP-01174] c02 N70-41589
- TEST CHAMBERS**
- System for continuous monitoring of exhalations, weighing, and cage cleaning for animal exposed to controlled atmosphere for toxic study
[NASA-CASE-XAC-05333] c11 N71-22875
- Multisample test chamber for exposing materials to X rays, temperature change, and gaseous conditions and determination of material effects
[NASA-CASE-XMS-02930] c11 N71-23042
- Flammability test chamber for testing materials in certain predetermined environments
[NASA-CASE-KSC-10126] c11 N71-24985
- Pressure seals suitable for use in environmental test chambers
[NASA-CASE-NFO-10796] c15 N71-27068
- Test chamber for determining decomposition and autoignition of materials used in spacecraft under controlled environmental conditions
[NASA-CASE-KSC-10198] c11 N71-28629
- Test chambers with orifice and helium mass spectrometer for detecting leak rate of encapsulated semiconductor devices
[NASA-CASE-BRC-10150] c14 N71-28992
- Method for measuring biaxial stress in a body subjected to stress inducing loads
[NASA-CASE-NFS-23299-1] c39 N77-28511
- TEST EQUIPMENT**
- Equipment for testing of ground station ranging equipment and spacecraft transponders
[NASA-CASE-XMS-05454-1] c07 N71-12391
- Apparatus for tensile strength testing of specimen by pressurized fluid
[NASA-CASE-XRS-06250] c14 N71-15600
- Development of black-body source calibration furnace
[NASA-CASE-XLE-01399] c33 N71-15625
- Design and characteristics of thermocouples consisting of flexible tape for improved attachment to temperature source
[NASA-CASE-XNP-01659] c14 N71-23039
- Automatic controlled thermal fatigue testing apparatus
[NASA-CASE-XLA-02059] c33 N71-24276
- Development and characteristics of electric circuitry for detecting electrical pulses rise time and amplitude
[NASA-CASE-XNP-08804] c09 N71-24717
- Automated ball rebound resilience test equipment for determining viscoelastic properties of polymers
[NASA-CASE-XLA-08254] c14 N71-26161
- Portable equipment for validating C band launch pad antennas and transmission lines used for spacecraft checkout
[NASA-CASE-XRS-10543] c07 N71-26292
- Acoustic vibration test apparatus for wiring harnesses
[NASA-CASE-HSC-15158-1] c14 N72-17325

- Design and development of two types of atmosphere sampling chambers
[NASA-CASE-MSC-11372] c13 N72-25323
- Development of apparatus for testing burning rate and flammability of materials
[NASA-CASE-XMS-09690] c33 N72-25913
- Development of apparatus for detonating explosive devices in order to determine forces generated and detonation propagation rate
[NASA-CASE-LAR-10800-1] c33 N72-27959
- Equipment for vibration testing of assemblies, components, and other articles
[NASA-CASE-GSC-11302-1] c14 N73-13416
- Design and development of test stand system for supporting test items in vacuum chamber
[NASA-CASE-MFS-21362] c11 N73-20267
- Development and characteristics of apparatus for measuring intensity of electric field in atmosphere
[NASA-CASE-KSC-10730-1] c14 N73-32318
- Test equipment to prevent buckling of small diameter specimens during compression tests
[NASA-CASE-LAR-10440-1] c14 N73-32323
- Wind tunnel model and method
[NASA-CASE-LAR-10812-1] c09 N74-17955
- Anti-buckling fatigue test assembly --- for subjecting metal specimen to tensile and compressive loads at constant temperature
[NASA-CASE-LAR-10426-1] c09 N74-19528
- Method and apparatus for checking fire detectors
[NASA-CASE-GSC-11600-1] c35 N74-21019
- Battery testing device --- for testing cells of multiple-cell battery
[NASA-CASE-MFS-20761-1] c44 N74-27519
- Signal conditioner test set
[NASA-CASE-KSC-10750-1] c35 N75-12270
- Particulate and aerosol detector
[NASA-CASE-LAR-11434-1] c35 N76-22509
- High temperature strain gage calibration fixture
[NASA-CASE-LAR-11500-1] c35 N76-24523
- Method and means for testing a glancing-incidence mirror system --- for X-ray telescopes
[NASA-CASE-MFS-22409-2] c74 N76-26988
- Method of and means for testing a tape record/playback system
[NASA-CASE-MFS-22671-2] c35 N77-17426
- TEST FACILITIES**
- Electric propulsion engine test chamber
[NASA-CASE-XLE-00252] c11 N70-34844
- Test apparatus for determining mechanical properties of refractory materials at high temperatures in vacuum or inert atmospheres
[NASA-CASE-XLE-00335] c14 N70-35368
- Gas analyzer for bi-gaseous mixtures suitable for use in test facilities
[NASA-CASE-XIA-01131] c14 N71-10774
- Design and characteristics of device for launching models in wind tunnels without disturbance of air flow
[NASA-CASE-IMP-03578] c11 N71-23030
- Design, development, and operation of shock tube with bypass piston tunnel
[NASA-CASE-NPO-12109] c11 N72-22245
- TEST STANDS**
- Automatic balancing device for use on frictionless supported attitude-controlled test platforms
[NASA-CASE-LAR-10774] c10 N71-13545
- Micro-pound extended range thrust stand for small rocket engines
[NASA-CASE-GSC-10710-1] c28 N71-27094
- TETHERING**
- Force separation rigid tethering device using cables
[NASA-CASE-XIA-02332] c32 N71-17609
- Space expandable tether device for use as passageway between two docked spacecraft
[NASA-CASE-XMS-10993] c15 N71-28936
- TETHERLINES**
- Flexible cable that can be made rigid
[NASA-CASE-MSC-13512-1] c15 N72-22485
- Tetherline system for orbiting satellites
[NASA-CASE-MFS-23564-1] c13 N77-11079
- TETRAPHENYLS**
- Chemical synthesis of thermally stable organometallic polymers with divalent metal ion and tetraphenylphosphonitrilic units
[NASA-CASE-HQM-10364] c06 N71-27363
- TEXTILES**
- Non-flammable elastomeric fiber from a fluorinated elastomer and containing an halogenated flame retardant
[NASA-CASE-MSC-14331-1] c27 N76-24405
- THERMAL ABSORPTION**
- Development and characteristics of calorimeter with integral heat sink for maintenance of constant temperature
[NASA-CASE-IMP-04208] c33 N71-29051
- THERMAL CONDUCTIVITY**
- Measuring conductive heat flow and thermal conductivity of laminar gas stream in cylindrical plug to simulate atmospheric reentry
[NASA-CASE-XLE-00266] c14 N70-34156
- Development of apparatus for measuring thermal conductivity
[NASA-CASE-XGS-01052] c14 N71-15992
- Heated element sensor for fluid flow detection in thermal conductive conduit with adaptive means to determine flow rate and direction
[NASA-CASE-MSC-12084-1] c12 N71-17569
- Method and apparatus for adjusting thermal conductance in electronic components for space use
[NASA-CASE-XNE-05524] c33 N71-24876
- Thermally conductive polymer for potting electrical components
[NASA-CASE-GSC-11304-1] c06 N72-21105
- Electrostatically controlled heat transfer system for conducting thermal energy
[NASA-CASE-NEO-11942-1] c33 N73-32818
- THERMAL CONDUCTORS**
- Thermal conductive, electrically insulated cleavable adhesive connection between electronic module and heat sink
[NASA-CASE-XMS-02087] c09 N70-41717
- Solar energy absorber
[NASA-CASE-MFS-22743-1] c44 N76-22657
- THERMAL CONTROL COATINGS**
- Low concentration alkaline solution treatment of aluminum with metal phosphate surface coatings to improve chemical bonding and reduce coating weight
[NASA-CASE-XIA-01995] c18 N71-23047
- Binder stabilized zinc oxide pigmented coating for spacecraft thermal control
[NASA-CASE-IMP-07770-2] c18 N71-26772
- Inorganic thermal control and solar reflector coatings
[NASA-CASE-MFS-20011] c18 N72-22566
- Mercaptan terminated polymer containing sulfonic acid salts of nitrosubstituted aromatic amines for heat and moisture resistant coatings
[NASA-CASE-ARC-10325] c06 N72-25147
- Lightweight electrically powered flexible thermal laminate --- made of metal fibers
[NASA-CASE-MSC-12662-1] c24 N75-16635
- Refractory porcelain enamel passive control coating for high temperature alloys
[NASA-CASE-MFS-22324-1] c27 N75-27160
- Thermal barrier coating system
[NASA-CASE-LFW-12554-1] c24 N76-23359
- Particulate and solar radiation stable coating for spacecraft
[NASA-CASE-LAR-10805-2] c34 N77-18382
- Method of preparing zinc orthotitanate pigment
[NASA-CASE-MFS-23345-1] c27 N77-30237
- THERMAL DEGRADATION**
- Use of silicon controlled rectifier shorting circuit to protect thermoelectric generator source from thermal destruction
[NASA-CASE-XGS-04808] c03 N69-25146
- Electrical failure detector in solid rocket propellant motor insulation against thermal degradation by fuel grain
[NASA-CASE-IMP-03968] c14 N71-27186
- THERMAL ENERGY**
- Direct conversion of thermal energy into electrical energy using crossed electric and magnetic fields
[NASA-CASE-XLE-00212] c03 N70-34134
- Concentrator device for controlling direction of solar energy onto energy converters
[NASA-CASE-XLE-01716] c09 N70-40234

- Storage stable, thermally activated foaming compositions for erecting and rigidizing mechanisms of thin sheet solar collectors [NASA-CASE-LAR-10373-1] c18 N71-26155
- Gaseous core diffusion nuclear reactor for thermal energy generation [NASA-CASE-LEW-10250-1] c22 N71-28759
- Electrostatically controlled heat transfer system for conducting thermal energy [NASA-CASE-NFO-11942-1] c33 N73-32818
- Solid medium thermal engine [NASA-CASE-ARC-10461-1] c44 N74-33379
- Panel for selectively absorbing solar thermal energy and the method of producing said panel [NASA-CASE-MFS-22562-1] c44 N76-14595
- Thermal energy storage system --- operating on superheating of liquids [NASA-CASE-MFS-23167-1] c44 N76-31667
- A thermal energy transformer [NASA-CASE-NFO-14058-1] c44 N77-30616
- Low to high temperature energy conversion system [NASA-CASE-NFO-13510-1] c44 N77-32581
- THERMAL EXPANSION**
- Gas valve operated by thermally expanding and contracting device [NASA-CASE-XLE-00815] c15 N70-35407
- Adjustable rigid mount for trihedral mirror formed of alloy with small coefficient of thermal expansion supporting screws and spring-biased plates [NASA-CASE-INP-08907] c23 N71-29123
- Application of spiral, bimetallic strip to create circular motion on mechanical shaft by changing strip temperature [NASA-CASE-NFO-11283] c09 N72-25260
- Glass-to-metal seals comprising relatively high expansion metals [NASA-CASE-LEW-10698-1] c37 N74-21063
- THERMAL FATIGUE**
- Automatic controlled thermal fatigue testing apparatus [NASA-CASE-XLA-02059] c33 N71-24276
- THERMAL INSULATION**
- Low thermal loss piping arrangement for moving cryogenic media through double chamber structure [NASA-CASE-INP-08882] c15 N69-39935
- Insulating system for receptacles of liquefied gases using wire cloth for forming frost layer [NASA-CASE-INP-00341] c15 N70-33323
- Unfired-ceramic, highly reflective composite insulation for large launch vehicles [NASA-CASE-INP-01030] c18 N70-41583
- Carbon dioxide purge systems to prevent condensation in spaces between cryogenic fuel tanks and hypersonic vehicle skin [NASA-CASE-XLA-01967] c31 N70-42015
- Preparation and characteristics of lightweight refractory insulation [NASA-CASE-INP-05279] c18 N71-16124
- Development of thermal insulation system for wing and control surfaces of hypersonic aircraft and reentry vehicles [NASA-CASE-XLA-00892] c33 N71-17897
- Prefabricated multilayered self-evacuating insulation panels using gas with low vapor pressure at cryogenic temperatures for application to storage of cryogenics [NASA-CASE-XLE-04222] c23 N71-22881
- Light weight plastic foam thermal insulation for cryogenic storage [NASA-CASE-XLE-02647] c18 N71-23658
- Development of foam insulation for filament wound cryogenic storage tank [NASA-CASE-XLE-03803] c15 N71-23816
- Multilayer insulation panels for cryogenic liquid containers [NASA-CASE-MFS-14023] c33 N71-25351
- Double-wall isothermal cylinder containing heat transfer fluid thermal reservoir as spacecraft insulation cover [NASA-CASE-MFS-20355] c33 N71-25353
- Structure of fabric layers for micrometeoroid protection garment with capability for eliminating heat shorts for use in manufacturing space suits [NASA-CASE-MSC-12109] c18 N71-26285
- Foam insulation thickness measuring and injection device for spacecraft applications [NASA-CASE-MFS-20261] c14 N71-27005
- Development of thermal insulation material for insulating liquid hydrogen tanks in spacecraft [NASA-CASE-INP-05046] c33 N71-28892
- Para-benzoquinone dioxide and concentrated mineral acid processed to yield intumescent or fire resistant, heat insulating materials [NASA-CASE-ARC-10304-1] c18 N73-26572
- Development and characteristics of thermal control system for maintaining constant temperature within spacecraft module with wide variations of component heat transfer [NASA-CASE-GSC-11018-1] c31 N73-30829
- Heater-mixer for stored fluids [NASA-CASE-ARC-10442-1] c35 N74-15093
- Intumescent composition, foamed product prepared therewith and process for making same [NASA-CASE-ARC-10304-2] c27 N74-27037
- High current electrical lead --- for thermionic converters [NASA-CASE-LEW-10950-1] c33 N74-27683
- Structural heat pipe --- for spacecraft wall thermal insulation system [NASA-CASE-GSC-11619-1] c34 N75-12222
- Insulation foil and method of making [NASA-CASE-LEW-11484-2] c24 N75-14839
- Thermal insulation attaching means [NASA-CASE-MSC-12619-1] c39 N75-21671
- Strain arrestor plate for fused silica tile --- bonding of thermal insulation to metallic plates or structural parts [NASA-CASE-MSC-14182-1] c27 N76-14264
- Ceramic fiber insulating material and methods of producing same --- product development of foams for thermal insulation [NASA-CASE-MSC-14795-1] c27 N76-15314
- Auger attachment method for insulation --- of spacecraft [NASA-CASE-MSC-12615-1] c37 N76-19437
- Flexible pile thermal barrier seal [NASA-CASE-MSC-19568-1] c37 N76-23585
- Extreme temperature thermal control coating [NASA-CASE-LAE-11756-1] c24 N76-26284
- Intumescent-ablator coatings using endothermic fillers [NASA-CASE-ARC-11043-1] c34 N77-14372
- Thermal insulation protection means [NASA-CASE-MSC-12737-1] c34 N77-22423
- Thermal insulation attaching means --- adhesive bonding of felt vibration isolators under ceramic tiles [NASA-CASE-MSC-12619-2] c16 N77-31237
- THERMAL FLASHES**
- Apparatus for producing monochromatic light from continuous plasma source [NASA-CASE-INP-04167-2] c25 N72-24753
- THERMAL PROTECTION**
- Thermoprotective device for balances [NASA-CASE-XAC-00648] c14 N70-40400
- Design, development, and characteristics of ablation structures [NASA-CASE-INP-01816] c33 N71-15623
- Development of spacecraft radiator cover [NASA-CASE-MSC-12049] c31 N71-16080
- Characteristics of foamed-in-place ceramic refractory insulating material and method of fabrication [NASA-CASE-IGS-02435] c18 N71-22998
- Unfired ceramic insulation for protection from radiant heating environments [NASA-CASE-MFS-14253] c33 N71-24858
- Development of solid state polymer coating for obtaining thermal balance in spacecraft components [NASA-CASE-XIA-01745] c33 N71-28903
- Anodizing method for providing metal surfaces with temperature reducing coatings against flames [NASA-CASE-XLE-00035] c33 N71-29151
- Ablative heat shield for protection from aerodynamic heating of reentry spacecraft [NASA-CASE-MSC-12143-1] c33 N72-17947
- Flexible fire retardant polyisocyanate modified neoprene foam --- for thermal protective devices [NASA-CASE-ARC-10180-1] c27 N74-12814
- Thermal insulation attaching means [NASA-CASE-MSC-12619-1] c39 N75-21671
- Reaction cured glass and glass coatings [NASA-CASE-ARC-11051-1] c27 N77-10201

- Intumescent coating containing
4,4'-dinitrosulfanilide
[NASA-CASE-ARC-11042-1] c24 N77-11119
- THERMAL RADIATION**
- Miniaturized radiometer for detecting low level
thermal radiation
[NASA-CASE-XLA-04556] c14 N69-27484
- Temperature sensitive capacitor device for
detecting very low intensity infrared radiation
[NASA-CASE-XNP-09750] c14 N69-39937
- High temperature source of thermal radiation
[NASA-CASE-XLE-00490] c33 N70-34545
- Development and characteristics of thermal
radiation shielding of refractory metal foil
used for induction furnace
[NASA-CASE-XLE-03432] c33 N71-24145
- Black body cavity radiometer with thermal
resistance wire bridge circuit
[NASA-CASE-XNP-08961] c14 N71-24809
- Development of method for protecting large and
oddly shaped areas from radiant and convective
heat
[NASA-CASE-XNP-01310] c33 N71-28852
- THERMAL REACTORS**
- Fuel system for thermal nuclear reactor which
uses inorganic ion exchanger
[NASA-CASE-LEW-11645-2] c22 N73-28660
- Nonequilibrium radiation nuclear reactor
[NASA-CASE-HCN-10841-1] c73 N75-22108
- THERMAL RESISTANCE**
- Single electrical circuit component combining
diode, fuse, and blow indicator with
elongated tube of heat resistant transparent
material
[NASA-CASE-XKS-03381] c09 N71-22796
- Polyimide foam for the thermal insulation and
fire protection
[NASA-CASE-ARC-10464-1] c27 N74-12812
- Dual measurement ablation sensor
[NASA-CASE-IAR-10105-1] c34 N74-15652
- Self-regulating proportionally controlled
heating apparatus and technique
[NASA-CASE-GSC-11752-1] c77 N75-20140
- Heat resistant polymers of oxidized
styrylphosphine
[NASA-CASE-HSC-14903-1] c27 N76-28425
- THERMAL SHOCK**
- Development of equipment for measuring thermal
shock resistance of thin discs of material
[NASA-CASE-XLB-02024] c14 N71-22964
- Thermal shock resistant hafnia ceramic materials
[NASA-CASE-LAR-10894-1] c18 N73-14584
- Thermal shock and erosion resistant tantalum
carbide ceramic material
[NASA-CASE-LAR-11902-1] c27 N76-23436
- THERMAL SIMULATION**
- Simulating operation of thermopile vacuum gage
tube at high and low pressures
[NASA-CASE-XLA-02758] c14 N71-18481
- THERMAL STABILITY**
- Bonded solid lubricant coatings of calcium
fluoride and binder for high temperature
stability
[NASA-CASE-XMS-00259] c18 N70-36400
- Portable environmental control and life support
system for astronaut in and out of spacecraft
[NASA-CASE-IHS-09632-1] c05 N71-11203
- Chemical synthesis of thermally stable
organometallic polymers with divalent metal
ion and tetraphenylphosphonitrilic units
[NASA-CASE-HCN-10364] c06 N71-27363
- Cermet for nuclear fuel constructed by pressing
metal coated ceramic particles in die at
temperature to cause bonding of metal
coatings, and tested for thermal stability
[NASA-CASE-LEW-10219-1] c18 N71-28729
- Ultraviolet and thermally stable polymer
compositions
[NASA-CASE-ARC-10592-1] c27 N74-21156
- Ultraviolet and thermally stable polymer
compositions
[NASA-CASE-ARC-10592-2] c27 N76-32315
- THERMAL STRESSES**
- Multilegged support system for wind tunnel test
models subjected to thermal dynamic loading
[NASA-CASE-XLA-01326] c11 N71-21481
- Development of device for simulating cyclic
thermal loading of flexible materials by
application of mechanical stresses and
deformations
[NASA-CASE-LAR-10270-1] c32 N72-25877
- Apparatus and method for reducing thermal stress
in a turbine rotor
[NASA-CASE-LEW-12232-1] c07 N77-18160
- THERMIONIC CATHODES**
- Thermionic cesium diode converter with cavity
emitters
[NASA-CASE-NFO-10412] c09 N71-28421
- THERMIONIC CONVERTERS**
- Vacuum thermionic converter with short-circuited
triodes and increased electron transmission
and conversion efficiency
[NASA-CASE-XLE-01015] c03 N69-39898
- Thermionic converter for converting heat energy
directly into electrical energy
[NASA-CASE-XLE-01903] c22 N71-23599
- Thermionic cesium diode converter with cavity
emitters
[NASA-CASE-NFO-10412] c09 N71-28421
- Development and characteristics of solar cells
with phosphors in cover glass to improve
response to solar ultraviolet radiation
[NASA-CASE-ARC-10050] c03 N71-33409
- Reactor heated in-core diodes for energy
conversion
[NASA-CASE-NFO-10542] c09 N72-27228
- High current electrical lead --- for thermionic
converters
[NASA-CASE-LEW-10950-1] c33 N74-27683
- Electric power generation system directory from
laser power
[NASA-CASE-NFO-13308-1] c36 N75-30524
- High temperature resistant cermet and ceramic
compositions --- for use in thermionic
converters or diodes
[NASA-CASE-NFO-13690-1] c27 N76-13294
- Nuclear thermionic converter ---
tungsten-thorium oxide rods
[NASA-CASE-NFO-13121-1] c73 N77-18891
- Cesium thermionic converters having lanthanum
hexaboride electrodes
[NASA-CASE-LEW-12038-2] c44 N77-32595
- THERMIONIC DIODES**
- Electric power system utilizing thermionic
plasma diodes in parallel and heat pipes as
cathodes
[NASA-CASE-XNP-05843] c03 N71-11055
- Thermionic diode switch for use in high
temperature region to chop current from dc
source
[NASA-CASE-NFO-10404] c03 N71-12255
- Microamperage current measuring circuit, with
two subminiature thermionic diodes with
filament cathodes
[NASA-CASE-XNP-00384] c09 N71-13530
- Electric power system with thermionic diodes and
circulatory liquid metal coolant lines
[NASA-CASE-NFS-14114] c33 N71-27862
- Reactor heated in-core diodes for energy
conversion
[NASA-CASE-NFO-10542] c09 N72-27228
- High temperature resistant cermet and ceramic
compositions --- for use in thermionic
converters or diodes
[NASA-CASE-NFO-13690-1] c27 N76-13294
- THERMIONIC EMITTERS**
- Oxygen-doped tantalum emitter for thermionic
devices such as cesium vapor diodes
[NASA-CASE-NFO-11138] c03 N70-34646
- THERMIONIC POWER GENERATION**
- Control for nuclear thermionic power source ---
power supply circuits, energy policy
[NASA-CASE-NFO-13114-2] c44 N76-15573
- THERMISTORS**
- Matched thermistors for microwave power meters
with compensation for temperature changes
[NASA-CASE-NFO-10348] c10 N71-12554
- Thermistor holder for skin temperature
measurements
[NASA-CASE-ARC-10855-1] c52 N77-10780
- THERMOCHROMATIC MATERIALS**
- Thermochromic compositions for detecting heat
levels in electronic circuits and devices
[NASA-CASE-NFO-10764-1] c14 N73-14428
- Heat detection and compositions and devices
therefor
[NASA-CASE-NFO-10764-2] c35 N75-25122

THERMOCOUPLE PYROMETERS

Dual measurement ablative sensor
[NASA-CASE-IAR-10105-1] c34 N74-15652

THERMOCOUPLES

Heat flux sensor assembly with proviso for heat shield to reduce radiative transfer between sensor elements
[NASA-CASE-XMS-05909-1] c14 N69-27459

Gas cooled high temperature thermocouple
[NASA-CASE-XLE-05475-1] c33 N71-15568

Control of fusion welding through use of thermocouple wire
[NASA-CASE-MFS-06074] c15 N71-20393

Heat sensing instrument, using thermocouple junction connected under heavy conducting material
[NASA-CASE-XIA-01551] c14 N71-22989

Design and characteristics of thermocouples consisting of flexible tape for improved attachment to temperature source
[NASA-CASE-XNP-01659] c14 N71-23039

Mixed liquid and vapor phase analyzer design with thermocouples for relative heat transfer measurement
[NASA-CASE-NFO-10691] c14 N71-26199

Development of thermocouple instrument for measuring temperature of wall heated by flowing fluid without disturbing boundary layer
[NASA-CASE-XLE-05230] c14 N72-27410

Thermocouple apparatus for measuring wall temperatures in regeneratively cooled rocket engines having thin walled cooling passages
[NASA-CASE-XLE-05230-2] c14 N73-13417

Development of flexible thermocouple in form of tape for adaptation to special temperature measuring conditions
[NASA-CASE-LEW-11072-1] c14 N73-24472

Thermocouple tape --- developed from thermoelectrically different metals
[NASA-CASE-LEW-11072-2] c35 N76-15434

Thermocouples of molybdenum and iridium alloys for more stable vacuum-high temperature performance
[NASA-CASE-LEW-12174-1] c35 N76-19407

Thermocouple installation
[NASA-CASE-NFO-13540-1] c35 N77-14409

Thermocouples of tantalum and rhenium alloys for more stable vacuum-high temperature performance
[NASA-CASE-LEW-12050-1] c35 N77-32454

THERMODYNAMIC PROPERTIES

Development of equipment for measuring thermal shock resistance of thin discs of material
[NASA-CASE-XLE-02024] c14 N71-22964

Characteristics of fumed-in-place ceramic refractory insulating material and method of fabrication
[NASA-CASE-XGS-02435] c18 N71-22998

Operating properties of superconducting magnet in vacuum environment
[NASA-CASE-XNP-06503] c23 N71-29049

Cobalt-tungsten alloys with superior strength at elevated temperatures
[NASA-CASE-LEW-10436-1] c17 N73-32415

THERMOELECTRIC GENERATORS

Use of silicon controlled rectifier shorting circuit to protect thermoelectric generator source from thermal destruction
[NASA-CASE-XGS-04808] c03 N69-25146

Procedure for segmenting lead telluride and silicon germanium thermoelectric elements to obtain composite elements effective over wide temperature range
[NASA-CASE-XGS-05718] c26 N71-16037

Low weight, integrated thermoelectric generator/antenna combination for spacecraft
[NASA-CASE-XER-09521] c09 N72-12136

Thermally cascaded thermoelectric generator with radioisotopic heat source
[NASA-CASE-NFO-10753] c03 N72-26031

THERMOELECTRIC MATERIALS

Bonding method for improving contact between lead telluride thermoelectric elements and tungsten electrodes
[NASA-CASE-XGS-04554] c15 N69-39786

Procedure for segmenting lead telluride and silicon germanium thermoelectric elements to obtain composite elements effective over wide temperature range
[NASA-CASE-XGS-05718] c26 N71-16037

THERMOELECTRIC POWER GENERATION

Thermoelectric power conversion by liquid metal flowing through magnetic field
[NASA-CASE-XNP-00644] c03 N70-36803

Operation method for combined electrolysis device and fuel cell using molten salt to produce power by thermoelectric regeneration mechanism
[NASA-CASE-XLE-01645] c03 N71-20904

Thermoelectric power system --- for spacecraft
[NASA-CASE-MFS-22002-1] c44 N76-16612

THERMOELECTRICITY

Development of flexible thermocouple in form of tape for adaptation to special temperature measuring conditions
[NASA-CASE-LEW-11072-1] c14 N73-24472

Device for measuring thermoelectric properties of materials under high pressure
[NASA-CASE-NFO-11749] c14 N73-28486

THERMOLUMINESCENCE

Method for detecting oxygen in gas by thermoluminescence
[NASA-CASE-LAR-10668-1] c06 N73-16106

A method for aerosol analysis by thermoluminescence
[NASA-CASE-LAR-12046-1] c45 N77-17609

THERMOMAGNETIC EFFECTS

Thermomagnetic recording and magneto-optic playback system having constant intensity laser beam control
[NASA-CASE-NFO-11317-2] c36 N74-13205

THERMOMETERS

Platinum resistance thermometer circuit
[NASA-CASE-MSC-12327-1] c35 N77-27368

THERMOPHYSICAL PROPERTIES

Method for determining thermo-physical properties of specimens --- photographic recording of changes in thin film phase-change temperature indicating material in wind tunnel
[NASA-CASE-LAR-11053-1] c25 N74-18551

Apparatus for determining thermophysical properties of test specimens
[NASA-CASE-LAR-11883-1] c09 N77-27131

THERMOPILES

Differential thermopile for measuring cooling water temperature rise
[NASA-CASE-XAC-00812] c14 N71-15598

Horizon sensor design with digital sampling of spaced radiation-compensated thermopile infrared detectors
[NASA-CASE-XNP-06957] c14 N71-21088

Development of thermopile with sensor surface to receive radiant energy and to provide measurement of energy quantity
[NASA-CASE-NFO-11493] c14 N73-12447

THERMOPLASTIC RESINS

Boron trifluoride coatings for thermoplastic materials
[NASA-CASE-ARC-11057-1] c27 N77-26308

THERMOREGULATION

Thermoregulating with cooling flow pipe network for humans
[NASA-CASE-XMS-10269] c05 N71-24147

THERMOSETTING RESINS

Vacuum method for molding thermosetting compounds used as ablative materials
[NASA-CASE-XIA-01091] c15 N71-10672

Procedure for bonding polytetrafluoroethylene thermal protective sleeves to magnesium alloy conical shell components with different thermal coefficients
[NASA-CASE-XLA-01262] c15 N71-21404

Method for honeycomb panel bonding by thermosetting film adhesive with electrical heat means
[NASA-CASE-XNP-01402] c18 N71-21651

Heat treatment and tooling for forming shapes from thermosetting honeycomb core sheets
[NASA-CASE-NFO-11036] c15 N72-24522

Fluorinated polyurethanes produced by reacting hydroxy terminated perfluoro polyether with diisocyanate
[NASA-CASE-NFO-10767-2] c06 N72-27151

Evacuated displacement compression molding
[NASA-CASE-LAR-10782-1] c31 N74-14133

Method for compression molding of thermosetting plastics utilizing a temperature gradient across the plastic to cure the article
[NASA-CASE-LAR-10489-1] c31 N74-18124

- Evacuated, displacement compression mold --- of tubular bodies from thermosetting plastics
[NASA-CASE-LAR-10782-2] c31 N75-13111
- THERMOSTATS**
Thermal switch for transferring excess heat from one region to another heat dissipating one
[NASA-CASE-XNP-00463] c33 N70-36847
Design and development of linear actuator based on bimetallic spring expansion
[NASA-CASE-NFO-10637] c15 N72-12409
Thermostatically controlled non-tracking type solar energy concentrator
[NASA-CASE-NFO-13497-1] c44 N76-14602
- THICK FILMS**
Material compositions and processes for developing dielectric thick films used in microcircuit capacitors
[NASA-CASE-LAR-10294-1] c26 N72-28762
- THICKNESSES**
Myocardium wall thickness transducer and measuring method
[NASA-CASE-NFO-13644-1] c52 N76-29895
- THIN FILMS**
Temperature sensitive capacitor device for detecting very low intensity infrared radiation
[NASA-CASE-XNP-05750] c14 N69-39937
Means and methods of depositing thin films on substrates
[NASA-CASE-XNP-00595] c15 N70-34967
Method of forming thin window drifted silicon charged particle detector
[NASA-CASE-XLB-00808] c24 N71-10560
Describing apparatus used in vacuum deposition of thin film inductive windings for spacecraft microcircuitry
[NASA-CASE-XNP-01667] c15 N71-17647
Describing method for vapor deposition of gallium arsenide films to manganese substrates to provide semiconductor devices with low resistance substrates
[NASA-CASE-XNP-01328] c26 N71-18064
Development of stable electronic amplifier adaptable for monolithic and thin film construction
[NASA-CASE-XGS-02812] c09 N71-19466
Sputter proof evaporant source design for use in vacuum deposition of solid thin films on substrates
[NASA-CASE-XNP-06065] c15 N71-20395
Binding layer of semiconductor particles by electrodeposition
[NASA-CASE-XNP-01959] c26 N71-23043
Device for high vacuum film deposition with electromagnetic ion steering
[NASA-CASE-NFO-10331] c09 N71-26701
Magnetic recording head composed of ferrite core coated with thin film of aluminum-iron-silicon alloy
[NASA-CASE-GSC-10097-1] c08 N71-27210
Thin film capacitive bolometer and capacitance temperature interchange sensor
[NASA-CASE-NFO-10607] c09 N71-27232
Electrical connections for thin film hybrid microcircuits
[NASA-CASE-XMS-02182] c10 N71-28783
Single crystal film semiconductor devices
[NASA-CASE-ERC-10222] c09 N72-22199
Waveguide, thin film window and microwave irises
[NASA-CASE-LAR-10513-1] c07 N72-25170
Thin absorbing metallic film for increased visible light transmission
[NASA-CASE-LAR-10836-1] c26 N72-27784
Development of thin film microwave iris installed in microwave waveguide transverse to flow of energy in waveguide
[NASA-CASE-LAR-10511-1] c09 N72-29172
Development of procedure for producing thin transparent films of zinc oxide on transparent refractory substrate
[NASA-CASE-FRC-10019] c15 N73-12487
Process for analysis of strain field of structures subjected to large deformations involving low modulus substrate with thin coating
[NASA-CASE-LAR-10765-1] c32 N73-20740
Dual wavelength system for monitoring film deposition
[NASA-CASE-MFS-20675] c26 N73-26751
- Thin film analyzer utilizing holographic techniques
[NASA-CASE-MFS-20823-1] c16 N73-30476
Transparent switchboard which permits optical display devices to be adapted for use in man machine communications
[NASA-CASE-MSC-13746-1] c10 N73-32143
Method for determining thermo-physical properties of specimens --- photographic recording of changes in thin film phase-change temperature indicating material in wind tunnel
[NASA-CASE-LAR-11053-1] c25 N74-18551
Method of preparing water purification membranes --- polymerization of allyl amine as thin films in plasma discharge
[NASA-CASE-ARC-10643-1] c25 N75-12087
System for depositing thin films
[NASA-CASE-MFS-20775-1] c31 N75-12161
Method of producing a storage bulb for an atomic hydrogen maser
[NASA-CASE-NFO-13050-1] c36 N75-15029
Method of forming metal hydride films
[NASA-CASE-LFW-12083-1] c26 N76-18262
Integrated structure vacuum tube
[NASA-CASE-ARC-10445-1] c31 N76-31365
- THIN PLATES**
Dichroic plate --- as bandpass filters
[NASA-CASE-NFO-13506-1] c35 N76-15435
- THIN WALLED SHELLS**
Thin walled pressure test vessel using low-melting alloy-filled joint to attach shell to heads
[NASA-CASE-XLB-04677] c15 N71-10577
- THIN WALLS**
Channel-type shell construction for rocket engines and related configurations
[NASA-CASE-XLB-00144] c28 N70-34860
Sealed separable connection for thin wall metal tube
[NASA-CASE-NFO-10064] c15 N71-17693
Low mass truss structure with elongated thin-walled tubular segments
[NASA-CASE-LAR-10546-1] c11 N72-25287
Development of differential pressure control system using motion of mechanical diaphragms to operate electric switch
[NASA-CASE-MFS-14216] c14 N73-13418
Method of fabricating an article with cavities --- with thin bottom walls
[NASA-CASE-LAR-10318-1] c31 N74-18089
Method of fabricating an object with a thin wall having a precisely shaped slit
[NASA-CASE-LAR-10409-1] c31 N74-21059
- THORIUM FLUORIDES**
Ultraviolet filter of thorium fluoride and cryolite on quartz base
[NASA-CASE-XNP-02340] c23 N69-24332
- THORIUM OXIDES**
Nuclear thermionic converter --- tungsten-thorium oxide rods
[NASA-CASE-NFO-13121-1] c73 N77-18891
- THREADS**
Gage for quality control of sealing surfaces of threaded boss
[NASA-CASE-XNP-04966] c14 N71-17658
Threadless fastener apparatus comprising receiving apertures for plurality of articles, self-locked condition, and capable of using nonwalleable materials in both ends
[NASA-CASE-XPR-05302] c15 N71-23254
- THREE DIMENSIONAL MOTION**
Solid state controller three axes controller
[NASA-CASE-MSC-12394-1] c08 N74-10942
- THRESHOLD GATES**
Apparatus with summing network for compression of analog data by decreasing slope threshold sampling
[NASA-CASE-NFO-10769] c08 N72-11171
Radiation hardening of MOS devices by boron --- for stabilizing gate threshold potential
[NASA-CASE-GSC-11425-2] c76 N75-25730
- THRESHOLD LOGIC**
Silicon controlled rectifier pulse gate amplifier for blocking false gating caused by negative transient voltages
[NASA-CASE-XLA-07497] c09 N71-12514
- THRUST AUGMENTATION**
Exhaust nozzle with afterburning for generating thrust

- [NASA-CASE-XLA-00154] c28 N70-33374
Construction and method of arranging plurality
of ion engines to form cluster thereby
increasing efficiency and control by
decreasing heat radiated to space
[NASA-CASE-XNP-02923] c28 N71-23081
Reversed cowli flap inlet thrust augmentor ---
with adjustable airfoil
[NASA-CASE-ARC-1C754-1] c07 N75-24736
Thrust augmented spin recovery device
[NASA-CASE-LAR-11970-1] c08 N77-22147
- THRUST BEARINGS**
Thrust bearing
[NASA-CASE-LFW-11949-1] c37 N76-29588
- THRUST CHAMBERS**
Rocket chamber leak test fixture using tubular
plug
[NASA-CASE-XFR-09479] c14 N69-27503
Supporting and protecting frame structure and
plug for empty thrust chamber assembly,
handling, and shipping
[NASA-CASE-XNP-00580] c11 N70-35383
Large area-ratio nozzles for rocket motor thrust
chambers
[NASA-CASE-XLE-00145] c28 N70-36806
Method for shaping regeneratively cooled rocket
motor casing having minimum thickness at each
channel cross section
[NASA-CASE-XLE-00409] c28 N71-15658
Regeneratively cooled rocket motor casing with
tapered channels to insure minimum thicknesses
at each channel cross section for necessary
strength requirements
[NASA-CASE-XLE-05689] c28 N71-15659
Rocket engine injector orifice to accommodate
changes in density, velocity, and pressure,
thereby maintaining constant mass flow rate of
propellant into rocket combustion chamber
[NASA-CASE-XLE-03157] c28 N71-24736
Fuel and oxidizer injection head for thrust
chamber of reaction engine
[NASA-CASE-NPO-10046] c28 N72-17843
Continuous gas flow control by fluidic
proportional thruster system
[NASA-CASE-ARC-10106-1] c28 N72-22769
Radial magnetic field for ion thruster
[NASA-CASE-LFW-10770-1] c28 N72-22770
Thermal flux transfer system for maintaining
thrust chamber of operative reaction motor at
given temperatures
[NASA-CASE-NPO-12070-1] c28 N73-32606
- THRUST CONTROL**
Electromechanical actuator and its use in rocket
thrust control valve
[NASA-CASE-XNP-05975] c15 N69-23185
Solid propellant rocket vehicle thrust control
method and apparatus
[NASA-CASE-XNP-00217] c28 N70-38181
Thrust and attitude control apparatus using jet
nozzle in movable canard surface or fin
configuration
[NASA-CASE-XLE-03583] c31 N71-17629
Detonation reaction engine comprising outer
housing enclosing pair of inner walls for
continuous flow
[NASA-CASE-XNP-06926] c28 N71-22983
Low mass ionizing device for use in electric
thrust spacecraft engines
[NASA-CASE-XNP-01954] c28 N71-28850
Heated porous plug microthruster for spacecraft
reaction jet controlled systems such as fuel
flow regulation, propellant disassociation,
and heat transfer augmentation
[NASA-CASE-GSC-10690-1] c28 N72-18766
Multi-purpose wind tunnel reaction control model
block
[NASA-CASE-MSC-19706-1] c09 N77-19077
- THRUST LOADS**
Thrust measurement
[NASA-CASE-XNS-05731] c35 N75-29382
- THRUST MEASUREMENT**
Dynamometer measuring microforce thrust produced
by ion engine
[NASA-CASE-XLE-00702] c14 N70-40203
Development of thrust dynamometer for measuring
performance of jet and rocket engines
[NASA-CASE-XIB-05260] c14 N71-20429
Development of temperature compensated thrust
measuring gage for measuring forces as
- function of time in environment with varying
temperature
[NASA-CASE-XGS-02319] c14 N71-22965
Micro-pound extended range thrust stand for
small rocket engines
[NASA-CASE-GSC-10710-1] c28 N71-27094
- THRUST VECTOR CONTROL**
Thrust vector control by secondary injection of
fluid into rocket nozzle flow field to
separate exhaust flow
[NASA-CASE-XLE-00208] c28 N70-34294
High velocity guidance and spin stabilization
gyro controlled jet reaction system for launch
vehicle payloads
[NASA-CASE-XLA-01339] c31 N71-15692
Ion beam deflector system for electronic thrust
vector control for ion propulsion yaw, pitch,
and roll forces
[NASA-CASE-LFW-10689-1] c28 N71-26173
Tertiary flow injection system for thrust
vectoring of propulsive nozzle flow
[NASA-CASE-NFS-20831] c28 N71-29153
Development of thrust control system for
application to control of aircraft and
spacecraft
[NASA-CASE-MSC-13397-1] c21 N72-25595
Development of vortex fluid amplifier for
throttling rocket exhaust
[NASA-CASE-LFW-10374-1] c28 N73-13773
System for imposing directional stability on a
rocket-propelled vehicle
[NASA-CASE-NFS-21311-1] c20 N76-21275
- THRUST-WEIGHT RATIO**
Launch pad missile release system with bending
moment change rate reduction in thrust
distribution structure at liftoff
[NASA-CASE-XNP-03198] c30 N70-40353
- THYROID GLAND**
Apparatus for producing high purity I-123 ---
for thyroid measurement
[NASA-CASE-LFW-10518-3] c31 N74-10476
- TILES**
Strain arrestor plate for fused silica tile ---
bonding of thermal insulation to metallic
plates or structural parts
[NASA-CASE-MSC-14182-1] c27 N76-14264
- TILT WING AIRCRAFT**
An improved free wing for an aircraft
[NASA-CASE-FRC-10092-1] c05 N77-31135
- TIME CONSTANT**
Variable time constant, wide frequency range
smoothing network for noise removal from pulse
chains
[NASA-CASE-XGS-01983] c10 N70-41964
- TIME DISCRIMINATION**
Extra-long monostable multivibrator employing
bistable semiconductor switch to allow
charging of timing circuit
[NASA-CASE-XGS-00381] c09 N70-34819
- TIME DIVISION MULTIPLEXING**
Synchronizing apparatus for multi-access
satellite time division multiplex system
[NASA-CASE-XGS-05918] c07 N69-39974
Time division multiplexer with magnetic latching
relays
[NASA-CASE-XNP-00431] c09 N70-38998
Data processor having multiple sections
activated at different times by selective
power coupling to sections
[NASA-CASE-XGS-04767] c08 N71-12494
Minimum time delay unit for conventional time
multiplexed data compression channels
[NASA-CASE-XNP-08832] c08 N71-12506
Time division relay synchronizer with master
sync pulse for activating binary counter to
produce signal identifying time slot for station
[NASA-CASE-GSC-10373-1] c07 N71-19773
Sampling circuit for signal processing in
multiplex transmission by Fourier analysis
[NASA-CASE-NPO-10388] c07 N71-24622
Time division multiplexed telemetry transmitting
system controlled by programmed memory
[NASA-CASE-GSC-10131-1] c07 N71-24624
- TIME FUNCTIONS**
Cathode ray oscilloscope for analyzing
electrical waveforms representing amplitude
distribution of time function
[NASA-CASE-XNP-01383] c09 N71-10659

- TIME LAG**
Closed loop radio communication ranging system to determine distance between moving airborne vehicle and fixed ground station
[NASA-CASE-XNP-01501] c21 N70-41930
Minimum time delay unit for conventional time multiplexed data compression channels
[NASA-CASE-XNP-08832] c08 N71-12506
Apparatus for estimating amplitude and sign of phase difference or time lag between two signals
[NASA-CASE-NFO-11203] c10 N72-20224
Automatic transponder --- measurement of the internal delay time of a transponder
[NASA-CASE-GSC-12075-1] c32 N77-31350
- TIME MEASURING INSTRUMENTS**
Mechanism for measuring nanosecond time differences between luminous events using streak camera
[NASA-CASE-XLA-01987] c23 N71-23976
- TIME OF FLIGHT SPECTROMETERS**
Design and characteristics of time of flight mass spectrometer to measure or analyze gases at low pressures and time of flight of single gas molecule
[NASA-CASE-XNP-01056] c14 N71-23041
- TIME SERIES ANALYSIS**
Device for performing statistical time-series analysis of complex electrical signal waveforms
[NASA-CASE-MSC-12428-1] c10 N73-25240
- TIME SHARING**
Integrated time shared instrumentation display for aerospace vehicle simulators
[NASA-CASE-XLA-01952] c08 N71-12507
- TIME SIGNALS**
Monitoring system for signal amplitude ranges over predetermined time interval
[NASA-CASE-XMS-04061-1] c09 N69-39885
Development of method for synchronizing clocks at several ground stations based on signals received from spacecraft or satellites
[NASA-CASE-XNP-08875] c10 N71-23099
Time synchronization system for synchronizing clocks at remote locations with master clock using mcm reflected coded signals
[NASA-CASE-NFO-10143] c10 N71-26326
Circuit for measuring wide range of pulse rates by utilizing high capacity counter
[NASA-CASE-XNP-06234] c10 N71-27137
System for generating timing and control signals
[NASA-CASE-NFO-13125-1] c33 N75-19519
- TIMING DEVICES**
Design and development of synchronous servo loop control system
[NASA-CASE-XNP-03744] c10 N71-20448
Development of method for synchronizing clocks at several ground stations based on signals received from spacecraft or satellites
[NASA-CASE-XNP-08875] c10 N71-23099
Development and characteristics of resettable monostable pulse generator with charge rundown-timing circuit
[NASA-CASE-GSC-11139] c09 N71-27016
Data acquisition and processing system with buffer storage and timing device for magnetic tape recording of PCM data and timing information
[NASA-CASE-NFO-12107] c08 N71-27255
High speed photo-optical time recorder for indicating time at exposure of each frame of high speed movie camera film
[NASA-CASE-KSC-10294] c14 N72-18411
- TIRES**
Temperature sensor warning system for pneumatic tires of aircraft and ground vehicles
[NASA-CASE-XLA-01926] c14 N71-15620
Resilient wheel design with woven wire tire and abrasive treads for lunar surface vehicles
[NASA-CASE-NFS-13929] c15 N71-27091
- TISSUES (BIOLOGY)**
Servo-controlled intravital microscope system
[NASA-CASE-NFO-13214-1] c35 N75-25123
Improved tissue macerating instrument --- ophthalmic liquification pump
[NASA-CASE-LFW-12668-1] c52 N76-23837
Method and system for in vivo measurement of bone tissue using a tv level energy source
[NASA-CASE-MSC-14276-1] c52 N77-14737
System for and method of freezing biological tissue
[NASA-CASE-GSC-12173-1] c52 N77-27693
- TITANATES**
Vacuum preparation of zinc titanate pigment resistant to loss of reflective properties
[NASA-CASE-NFS-13532] c18 N72-17532
- TITANIUM**
Joining aluminum to stainless steel by bonding aluminum coatings onto titanium coated stainless steel and brazing aluminum to aluminum/titanium coated steel
[NASA-CASE-NFS-07369] c15 N71-20443
Weld-bonded titanium structures
[NASA-CASE-LAR-11549-1] c37 N77-11397
- TITANIUM ALLOYS**
Method to prevent stress corrosion cracking in titanium alloys
[NASA-CASE-NFO-10271] c17 N71-16393
Chemical spot tests for identification of titanium and titanium alloys used in aerospace vehicles
[NASA-CASE-LAR-10539-1] c17 N73-12547
- TITANIUM OXIDES**
Method of preparing zinc orthotitanate pigment
[NASA-CASE-NFS-23345-1] c27 N77-30237
- TOLERANCES (MECHANICS)**
Mechanism for restraining universal joints to prevent separation while allowing bending, angulation, and lateral offset in any position about axis
[NASA-CASE-XNP-02278] c15 N71-28951
- TOOLS**
Tool attachment for spreading or moving away loose elements from terminal posts during winding of filamentary elements
[NASA-CASE-XNP-02107] c15 N71-10809
Development of adjustable attitude guide block for setting pins perpendicular to irregular convex work surface
[NASA-CASE-XLA-07911] c15 N71-15571
Hand tool for forming dimples and nipples on end portion of tubes
[NASA-CASE-XMS-06876] c15 N71-21536
Tool for mounting and removing studs with adhesive coated head portion
[NASA-CASE-NFS-20299] c15 N72-11392
Insert facing tool --- manually operated cutting tool for forming studs in honeycomb material
[NASA-CASE-NFS-21485-1] c37 N74-25968
- TOOTH DISEASES**
Process for preparing calcium phosphate salts for tooth repair
[NASA-CASE-ERC-10338] c04 N72-33072
- TORCHES**
Computer controlled apparatus for maintaining welding torch angle and velocity during seam tracking
[NASA-CASE-XNP-03287] c15 N71-15607
Development of electric weeding torch with casing on one end to form inert gas shield
[NASA-CASE-XNP-02330] c15 N71-23798
- TOROIDS**
Flux gate magnetometer with toroidal gating coil and sclenoidal output coil for signal modulation or amplification
[NASA-CASE-XGS-01881] c09 N70-40123
- TORQUE**
Gearing system for eliminating backlash and filtering input torque fluctuations from high inertia load
[NASA-CASE-XGS-04227] c15 N71-21744
Coupling arrangement for isolating torque loads from axial, radial, and bending loads
[NASA-CASE-XLA-04897] c15 N72-22482
- TORQUE MOTORS**
Low speed phaselock speed control system --- for brushless dc motor
[NASA-CASE-GSC-11127-1] c09 N75-24758
- TORQUEMETERS**
Remote-reading torquemeter for use where high horsepower are transmitted at high rotational speeds
[NASA-CASE-XLE-00503] c14 N70-34818
Torquemeter for determining magnitude of torque generated by interaction of magnetic dipole between test specimen and ambient magnetic field
[NASA-CASE-XGS-01013] c14 N71-23725
- TORSO**
Restraint torso for increased mobility and reduced physiological effects while wearing

- pressurized suits
[NASA-CASE-MSC-12397-1] c05 N72-25119
Spacesuit torso closure
[NASA-CASE-ARC-11100-1] c54 N77-25784
- TOUCH**
Mechanically operated hand which can depress trigger using touch control device
[NASA-CASE-MFS-20413] c15 N72-21463
Measuring method for cutaneous perception using instrument with elongated tubular housing
[NASA-CASE-MSC-13609-1] c05 N72-25122
Prosthetic limb with tactile sensing device
[NASA-CASE-MFS-16570-1] c05 N73-32013
- TOWERS**
Aerial capsule emergency separation device using jettisonable towers
[NASA-CASE-XLA-00115] c03 N70-33343
- TOXICITY AND SAFETY HAZARD**
Apparatus for remote handling of materials --- mixing or analyzing dangerous chemicals
[NASA-CASE-LAR-10634-1] c37 N74-18123
- TOXICOLOGY**
System for continuous monitoring of exhalations, weighing, and cage cleaning for animal exposed to controlled atmosphere for toxic study
[NASA-CASE-XAC-05333] c11 N71-22875
- TRACE CONTAMINANTS**
Describing crystal oscillator instrument for detecting condensable gas contaminants in vacuum apparatus
[NASA-CASE-NFO-10144] c14 N71-17701
Heated tungsten filter for removing oxygen impurities from cesium
[NASA-CASE-XNP-04262-2] c17 N71-26773
Electric discharge for treatment of trace contaminants
[NASA-CASE-ARC-10975-1] c54 N77-24771
- TRACE ELEMENTS**
Ion microprobe mass spectrometer with cooled electrode target for analyzing traces of fluids
[NASA-CASE-ERC-10014] c14 N71-28863
Automated system for identifying traces of organic chemical compounds in aqueous solutions
[NASA-CASE-NFO-13063-1] c25 N76-18245
Nulling device for detection of trace gases by NDIR absorption
[NASA-CASE-ARC-10760-1] c25 N76-22323
- TRACKING (POSITION)**
Sensor consisting of photocells mounted on pyramidal base for improved pointing accuracy of planetary trackers
[NASA-CASE-XNP-04180] c07 N69-39736
Telespectrograph for analyzing upper atmosphere by tracking bodies reentering atmosphere at high velocities
[NASA-CASE-XLA-03273] c14 N71-18699
Laser beam projector for continuous, precise alignment between target, laser generator, and astronomical telescope during tracking
[NASA-CASE-NFO-11087] c23 N71-29125
System and method for tracking a signal source --- employing feedback control
[NASA-CASE-BQN-10880-1] c32 N75-30385
Mount for continuously orienting a collector dish in a system adapted to perform both diurnal and seasonal solar tracking
[NASA-CASE-MFS-23267-1] c35 N77-20401
Sun tracking solar energy collector
[NASA-CASE-NFO-13921-1] c44 N77-24590
- TRACKING FILTERS**
System for phase locking onto carrier frequency signal located within receiver bandpass
[NASA-CASE-XGS-04994] c09 N69-21543
- TRACKING RADAR**
Electronic and mechanical scanning control system for monopulse tracking antenna
[NASA-CASE-XGS-05582] c07 N69-27460
Phase locked loop with sideband rejecting properties in continuous wave tracking radar
[NASA-CASE-XNP-02723] c07 N70-41680
Interferometric tuning acquisition and tracking radar antenna system
[NASA-CASE-XMS-09610] c07 N71-24625
Acquisition and tracking system for optical radar
[NASA-CASE-MFS-20125] c16 N72-13437
- TRACKING STATIONS**
Optical monitor panel consisting of translucent screen with test or meter information projected onto it from rear for application in control rooms of missile launching and tracking stations
[NASA-CASE-XKS-03509] c14 N71-23175
Simultaneous acquisition of tracking data from two stations
[NASA-CASE-NFO-13292-1] c32 N75-15854
- TRAFFIC CONTROL**
Traffic survey system --- using optical scanners
[NASA-CASE-MFS-22631-1] c66 N76-19888
- TRAILING-EDGE FLAPS**
Double hinged flap for boundary layer control over trailing edges of wings
[NASA-CASE-XLA-01290] c02 N76-42016
- TRAINING SIMULATORS**
Low and zero gravity simulator for astronaut training
[NASA-CASE-MFS-10555] c11 N71-19494
Apparatus for training astronaut crews to perform on simulated lunar surface under conditions of lunar gravity
[NASA-CASE-XMS-04798] c11 N71-21474
Kinesthetic control simulator --- for pilot training
[NASA-CASE-LAR-10276-1] c09 N75-15662
- TRAJECTORY ANALYSIS**
Table structure and rotating magnet system simulating gravitational forces on spacecraft and displaying trajectories between Earth, Venus, and Mercury
[NASA-CASE-XNP-00708] c14 N70-35394
Planetary atmospheric investigation using split trajectory dual flyby mode
[NASA-CASE-XAC-08494] c30 N71-15990
- TRAJECTORY CONTROL**
Spacecraft trajectory correction propulsion system
[NASA-CASE-XNP-01104] c28 N70-39931
Development of technique for control of free flight rocket vehicles
[NASA-CASE-XLA-00937] c31 N71-17691
Attitude stabilizer for nonguided missile or vehicle with respect to trajectory
[NASA-CASE-ARC-10134] c30 N72-17873
- TRANSDUCERS**
Fabrication of pressure-telemetry transducers
[NASA-CASE-XNP-09752] c14 N69-21541
Bootstrap unloading circuits for sampling transducer voltage sources without drawing current
[NASA-CASE-XNP-09768] c09 N71-12516
Transducer for measuring deflections from vibrating structures
[NASA-CASE-XLA-03135] c32 N71-16428
Describing device for surveying contour of surface using X-Y plotter and traveling transducer
[NASA-CASE-XLA-08646] c14 N71-17586
Rotary bead dropper and selector for testing micrometeorite transducers
[NASA-CASE-XGS-03304] c09 N71-22988
Development and characteristics of self-calibrating displacement transducer for measuring magnitude and frequency of displacement of bodies
[NASA-CASE-XLA-00781] c09 N71-22999
Transducer frame for use with extensometer to continuously monitor specimen sample
[NASA-CASE-XLA-10322] c15 N72-17452
Split range transducer
[NASA-CASE-XLA-11189] c10 N72-20222
Pulsed excitation voltage circuit for strain gage bridge transducers
[NASA-CASE-FRC-10036] c09 N72-22200
Passive type, magnifying scratch gage, force transducer
[NASA-CASE-LAR-10496-1] c14 N72-22437
Development of electronic detection system for remotely determining number and movement of enemy personnel
[NASA-CASE-ARC-10097-2] c07 N73-25160
Acoustical transducer calibrating system including differential pressure activating device
[NASA-CASE-FRC-10060-1] c14 N73-27379
Demodulator for carrier transducers
[NASA-CASE-NUC-10107-1] c33 N74-17930
LC-oscillator with automatic stabilized amplitude via bias current control --- power supply circuit for transducers
[NASA-CASE-MFS-21698-1] c33 N74-26732

- Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] c52 N74-27566
- Diode-gate bridge circuit means
[NASA-CASE-ABC-10364-3] c33 N75-19520
- Subminiature insertable force transducer ---
including a strain gage to measure forces in
muscles
[NASA-CASE-NFO-13423-1] c33 N75-31329
- Self-supporting strain transducer
[NASA-CASE-LAR-11263-1] c35 N75-33369
- Miniature muscle displacement transducer
[NASA-CASE-NFO-13519-1] c33 N76-19338
- Method and apparatus for nondestructive testing
of pressure vessels
[NASA-CASE-NFO-12142-1] c38 N76-28563
- Myocardium wall thickness transducer and
measuring method
[NASA-CASE-NFO-13644-1] c52 N76-29895
- Magnetometer --- with an automatic scanning
transducer
[NASA-CASE-LAR-11617-2] c35 N77-17430
- Apparatus and method for determining the
position of a radiant energy source
[NASA-CASE-GSC-12147-1] c35 N77-20410
- TRANSDUCERS**
- Impedance transformation device for signal mixing
[NASA-CASE-XGS-01110] c07 N69-24334
- High impedance alternating current sensing
transformer device between two balometers for
measuring insertion loss of test component
[NASA-CASE-XNP-01193] c10 N71-16057
- Magnetic current regulator for saturable core
transformer
[NASA-CASE-ERC-10075] c09 N71-24800
- Unsaturating magnetic core transformer design
with warning signal for electrical power
processing equipment
[NASA-CASE-ERC-10125] c09 N71-24893
- Development and characteristics of
electronically resettable fuse with saturable
core current sensing transformer having two
outside legs and center leg
[NASA-CASE-XGS-11177] c09 N71-27001
- Development and characteristics of voltage
regulator for connection in series with
alternating current source and load using
three leg, two-window transformer
[NASA-CASE-ERC-10113] c09 N71-27053
- Radial heat flux transformer for use in heating
and cooling processes
[NASA-CASE-NFO-10828] c33 N72-17948
- Current protection equipment for saturable core
transformers
[NASA-CASE-ERC-10075-2] c09 N72-22196
- Fail-safe multiple transformer circuit
configuration
[NASA-CASE-NFO-11078] c09 N72-25262
- Banded transformer cores
[NASA-CASE-NFO-11966-1] c33 N74-17928
- Solid-state current transformer
[NASA-CASE-MPS-22560-1] c33 N77-14335
- Circuit for automatic load sharing in parallel
converter modules
[NASA-CASE-NFO-14056-1] c33 N77-32402
- TRANSIENT HEATING**
- Thermocouple installation
[NASA-CASE-NFO-13540-1] c35 N77-14409
- TRANSIENT LOADS**
- Deployable cantilever support for deploying
solar cell arrays aboard spacecraft and
reducing transient loading
[NASA-CASE-NFO-10883] c31 N72-22874
- TRANSISTOR AMPLIFIERS**
- Overcurrent protecting circuit for push-pull
transistor amplifiers
[NASA-CASE-MSC-12033-1] c09 N71-13531
- Dual mode solid state power switch
[NASA-CASE-MFS-22880-2] c33 N77-31407
- TRANSISTOR CIRCUITS**
- Low power drain transistor feedback circuit
[NASA-CASE-XGS-04999] c09 N69-24317
- Design of transistorized ring counter circuit
with special steering and triggering circuits
[NASA-CASE-XGS-03095] c09 N69-27463
- EC transistor circuit to indicate each pulse of
pulse train and occurrence of nth pulse
[NASA-CASE-XNP-00906] c09 N70-41655
- Linear sawtooth voltage wave generator with
transistor timing circuit having capacitor and
zener diode feedback loops
[NASA-CASE-XMS-01315] c09 N70-41675
- Switching circuit with regeneratively connected
transistors eliminating power consumption when
not in use
[NASA-CASE-XNP-02654] c10 N70-42032
- High voltage transistor circuit
[NASA-CASE-XNP-06937] c09 N71-19516
- Complementary regenerative transistorized switch
circuit employing positive and negative feedback
[NASA-CASE-XGS-02751] c09 N71-23015
- Inverter drive circuit for semiconductor switch
[NASA-CASE-LEW-10233] c10 N71-27126
- Transistorized circuit for producing multiple
slope voltage sweep
[NASA-CASE-XMS-03542] c09 N71-28926
- Circuitry for high input impedance video
processor with high noise immunity
[NASA-CASE-NFO-10199] c09 N72-17156
- Ultra-stable oscillator with complementary
transistors
[NASA-CASE-GSC-11513-1] c33 N74-20862
- Inrush current limiter
[NASA-CASE-GSC-11789-1] c33 N77-14333
- A complementary DMOS-VMOS integrated circuit
structure
[NASA-CASE-GSC-12190-1] c33 N77-29403
- TRANSISTORS**
- Power supply with overload protection for series
stage transistor
[NASA-CASE-XMS-00913] c10 N71-23543
- Solid state circuit for switching alternating
current input signal as function of direct
current gating transistor
[NASA-CASE-XNP-06505] c10 N71-24799
- Broadband distribution amplifier with
complementary pair transistor output stages
[NASA-CASE-NFO-10003] c10 N71-26415
- Transistorized switching logic circuits with
tunnel diodes
[NASA-CASE-GSC-10878-1] c10 N72-22236
- Inverted geometry transistor for use with
monolithic integrated circuit
[NASA-CASE-ABC-10330-1] c09 N73-32112
- Four phase logic systems --- including
integrated microcircuits
[NASA-CASE-MSC-14240-1] c33 N75-14957
- TRANSITION FLOW**
- Ablation article and surface for analyzing flow
transition on ablative surface
[NASA-CASE-LAR-10439-1] c33 N73-27796
- TRANSITION TEMPERATURE**
- A method of preparing aromatic polyimides having
uniquely low softening temperatures
[NASA-CASE-LAR-11828-1] c23 N75-29181
- TRANSLATIONAL MOTION**
- Centrifuge mounted motion simulator with
elevator mechanism
[NASA-CASE-XAC-00399] c11 N70-34815
- Development and characteristics of translating
horizontal tail assembly for supersonic aircraft
[NASA-CASE-XLA-08801-1] c02 N71-11043
- Semilinear bearing comprising two rows of roller
bearings separated by spherical bearings and
permitting rotational and translational movement
[NASA-CASE-XLA-02809] c15 N71-22982
- Positioning mechanism for converting translatory
motion into rotary motion
[NASA-CASE-NFO-10679] c15 N72-21462
- TRANSMISSION EFFICIENCY**
- Microwave power transmission system wherein
level of transmitted power is controlled by
reflections from receiver
[NASA-CASE-MFS-21470-1] c44 N74-19870
- Linear phase demodulator including a phase
locked loop with auxiliary feedback loop
[NASA-CASE-GSC-12018-1] c33 N77-14334
- TRANSMISSION LINES**
- Portable equipment for validating C band launch
pad antennas and transmission lines used for
spacecraft checkout
[NASA-CASE-XMS-10543] c07 N71-26292
- Collapsible antenna boom and coaxial
transmission line having inflatable inner tube
[NASA-CASE-MFS-20068] c07 N71-27191
- Phase modulator with tuned variable length
electrical lines including coupling and
varactor diode circuits
[NASA-CASE-MSC-13201-1] c07 N71-28429

- Shielded flat conductor cable of ribbonlike wires laminates in thin flexible insulation
[NASA-CASE-HFS-13687-2] c09 N72-22198
- Development of phase control coupling for use with phased array antenna
[NASA-CASE-ERC-10285] c10 N73-16206
- Phase protection system for ac power lines
[NASA-CASE-HSC-17832-1] c33 N74-14956
- System for stabilizing cable phase delay utilizing a coaxial cable under pressure
[NASA-CASE-NPO-13138-1] c33 N74-17927
- TRANSMITTANCE**
Transmitting and reflecting diffuser
[NASA-CASE-LAR-10385-3] c23 N73-32538
- TRANSMITTER RECEIVERS**
Low weight, integrated thermoelectric generator/antenna combination for spacecraft
[NASA-CASE-XFR-09521] c09 N72-12136
- Location identification system with ground based transmitter and aircraft borne receiver/decoder
[NASA-CASE-EEC-10324] c07 N72-25173
- Automatic vehicle location system
[NASA-CASE-NPO-11850-1] c32 N74-12912
- Digital communication system
[NASA-CASE-HSC-13912-1] c32 N74-30524
- Redundant RF system for space applications
[NASA-CASE-NPO-13955-1] c32 N77-28358
- TRANSMITTERS**
Temperature telemetric transmitter with frequency determining tank circuit for short range transmission
[NASA-CASE-NFO-10649] c07 N71-24840
- Multicarrier communications system for transmitting modulated signals from single transmitter
[NASA-CASE-NPO-11548] c07 N73-26118
- Miniature multichannel biotelemetry system
[NASA-CASE-NFO-13065-1] c52 N74-26625
- Digital transmitter for data bus communications system
[NASA-CASE-HSC-14558-1] c32 N75-21486
- TRANSONIC SPEED**
Construction of leading edges of surfaces for aerial vehicles performing from subsonic to above transonic speeds
[NASA-CASE-XLA-01486] c01 N71-23497
- TRANSONIC WIND TUNNELS**
Wind tunnel test section for simulating high Reynolds number over transonic speed range
[NASA-CASE-HFS-20509] c11 N72-17183
- TRANSPARENCY**
Transparent polycarbonate resin, shell helmet and latch design for high altitude and space flight
[NASA-CASE-IHS-04935] c05 N71-11190
- Method and apparatus for producing an image from a transparent object
[NASA-CASE-GSC-11989-1] c74 N77-28932
- TRANSPARATION**
Rocket chamber and method of making
[NASA-CASE-LEW-11118-2] c20 N76-14191
- TRANSPONDERS**
Equipment for testing of ground station ranging equipment and spacecraft transponders
[NASA-CASE-IHS-05454-1] c07 N71-12391
- Spacecraft transponder and ground station radar system for mapping planetary surfaces
[NASA-CASE-NPO-11001] c07 N72-21118
- Loop transponder for regenerating code of nu-type ranging system
[NASA-CASE-NPO-11707] c07 N73-25161
- Automatic vehicle location system
[NASA-CASE-NPO-11850-1] c32 N74-12912
- Simultaneous acquisition of tracking data from two stations
[NASA-CASE-NPO-13292-1] c32 N75-15854
- Automatic transponder --- measurement of the internal delay time of a transponder
[NASA-CASE-GSC-12075-1] c32 N77-31350
- TRANSPORTATION**
Supporting and protecting frame structure and plug for empty thrust chamber assembly, handling, and shipping
[NASA-CASE-IMP-00580] c11 N70-35383
- TRAPS**
Deep trap, laser activated image converting system
[NASA-CASE-NPO-13131-1] c36 N75-19652
- TRAVELING WAVE AMPLIFIERS**
Sorrodyne traveling wave tube reentrant amplifier for synchronous communication satellites operating at microwave frequencies
[NASA-CASE-XGS-01022] c07 N71-16088
- Traveling wave solid state amplifier utilizing a semiconductor with negative differential mobility
[NASA-CASE-HQN-10069] c33 N75-27251
- TRAVELING WAVE MASERS**
Design of folded traveling wave maser structure
[NASA-CASE-IMP-05219] c16 N71-15550
- Comb type traveling wave maser amplifier for improved high gain broadband output
[NASA-CASE-NPO-10548] c16 N71-24831
- Independent gain and bandwidth control of a traveling wave maser
[NASA-CASE-NPO-13801-1] c36 N76-31514
- TRAVELING WAVE TUBES**
Segmented superconducting magnet producing staggered magnetic field and suitable for broadband traveling wave masers
[NASA-CASE-XGS-10518] c16 N71-28554
- Traveling wave tube circuit
[NASA-CASE-LEW-12013-1] c33 N77-17360
- TRAVELING WAVES**
Traveling wave maser for operation in 7 to 20 GHz frequency range
[NASA-CASE-NPO-11437] c16 N72-28521
- TRAYS**
Automatic multiple-sample applicator and electrophoresis apparatus
[NASA-CASE-ARC-10991-1] c25 N77-14157
- TREADMILLS**
Tread drum for animals
[NASA-CASE-ARC-10917-1] c37 N76-20485
- TRIGGER CIRCUITS**
Design of transistorized ring counter circuit with special steering and triggering circuits
[NASA-CASE-XGS-03095] c09 N69-27463
- Triggering system for electric arc driven impulse wind tunnel
[NASA-CASE-IMP-00411] c11 N70-36913
- Voltage range selection apparatus for sensing and applying voltages to electronic instruments without loading signal source
[NASA-CASE-IHS-06497] c14 N71-26244
- One shot multivibrator circuit for producing long duration output pulses
[NASA-CASE-ARC-10137-1] c09 N71-28468
- Voltage amplitude-responsive trigger circuit with silicon controlled rectifier
[NASA-CASE-GSC-10221-1] c09 N72-23171
- Rapidly pulsed, high intensity, incoherent light source
[NASA-CASE-XLE-2529-3] c33 N74-20859
- TRIGONOMETRY**
Electrical and electromechanical trigonometric computation assembly and space vehicle guidance system for aligning perpendicular axes of two sets of three-axes coordinate references
[NASA-CASE-IMP-00684] c21 N71-21688
- TRIMERS**
New trifunctional alcohol derived from trimer acid and novel method of preparation
[NASA-CASE-NPO-10714] c06 N69-31244
- Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LEW-12053-1] c27 N74-34579
- Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LEW-12053-2] c23 N77-32244
- TRIODES**
Vacuum thermionic converter with short-circuited triodes and increased electron transmission and conversion efficiency
[NASA-CASE-XLE-01015] c03 N69-39898
- TRITIUM**
Method for determining state of charge of alkali batteries by using tritium as tracer
[NASA-CASE-IMP-01464] c03 N71-10728
- TRUCKS**
Fifth wheel
[NASA-CASE-FRC-10081-1] c37 N77-14477
- TRUSSES**
Low mass truss structure with elongated

- thin-walled tubular segments
[NASA-CASE-LAR-10546-1] c11 N72-25287
- Lightweight structural columns --- for truss
structures
[NASA-CASE-LAR-12095-1] c39 N77-27432
- TUBE ANODES**
Dual membrane, hollow fiber fuel cell
[NASA-CASE-NFO-13732-1] c44 N77-19581
- TUBE CATHODES**
Dual membrane, hollow fiber fuel cell
[NASA-CASE-NFO-13732-1] c44 N77-19581
- TUBE HEAT EXCHANGERS**
High resistance cross flow heat exchangers for
electrothermal rocket engines
[NASA-CASE-XLE-01783] c28 N70-34175
- Gas chromatographic method for determining water
in nitrogen tetroxide rocket propellant
[NASA-CASE-NFO-10234] c06 N72-17094
- Liquid cooled brassiere and method of diagnosing
malignant tumors therewith
[NASA-CASE-ARC-11007-1] c52 N77-14736
- TUBES**
Forming tubes from long thin flat metal strips
[NASA-CASE-IGS-04175] c15 N71-18579
- Hermetic sealing device for ends of tubular
bodies during materials testing operations
[NASA-CASE-NFO-10431] c15 N71-29132
- TUMBLING MOTION**
Tumbling motion system for object demagnetization
[NASA-CASE-IGS-02437] c15 N69-21472
- TUMORS**
Liquid cooled brassiere and method of diagnosing
malignant tumors therewith
[NASA-CASE-ARC-11007-1] c52 N77-14736
- TUNGSTEN**
Bonding method for improving contact between
lead telluride thermoelectric elements and
tungsten electrodes
[NASA-CASE-IGS-04554] c15 N69-39786
- Method for producing porous tungsten plates for
ionizing cesium compounds for propulsion of
ion engines
[NASA-CASE-XLE-00455] c28 N70-38197
- Small plasma probe using tungsten wire collector
in tubular shield
[NASA-CASE-XLE-02578] c25 N71-20747
- Production method for manufacturing porous
tungsten bodies from tungsten powder particles
[NASA-CASE-XNP-04339] c17 N71-29137
- Vapor deposition method for forming metallized
tungsten contacts on silicon substrates
[NASA-CASE-GSC-10695-1] c09 N72-25259
- Nuclear thermionic converter ---
tungsten-thorium oxide rods
[NASA-CASE-NFO-13121-1] c73 N77-18891
- TUNGSTEN ALLOYS**
Evaporating crucible of tantalum-tungsten foil,
nickel alumina bonding agent, and ceramic
coating
[NASA-CASE-XLA-03105] c15 N69-27483
- Cobalt-tungsten alloys with superior strength at
elevated temperatures
[NASA-CASE-LPW-10436-1] c17 N73-32415
- Directionally solidified eutectic gamma plus
beta nickel-base superalloys
[NASA-CASE-LPW-12906-1] c26 N77-32279
- TUNING**
Active tuned circuits for microelectronic
construction
[NASA-CASE-GSC-11340-1] c10 N72-33230
- Microwave generator using Gunn effect for
magnetic tuning
[NASA-CASE-NFO-12106] c09 N73-15235
- TUNNEL DIODES**
Low power drain transistor feedback circuit
[NASA-CASE-IGS-04999] c09 N69-24317
- TUNNELS**
Deployable flexible tunnel
[NASA-CASE-NFS-22636-1] c37 N76-22540
- TURBINE BLADES**
Transpiration cooled turbine blade made from
metallic or ceramic wires
[NASA-CASE-XLE-00020] c15 N70-31226
- Modification and improvement of turbine blades
for maximum cooling efficiency
[NASA-CASE-XLE-00092] c15 N70-33264
- Preparation of nickel alloys for jet turbine
blades operating at high temperatures
[NASA-CASE-XLE-00151] c17 N70-33283
- External device for liquid spray cooling of gas
turbine blades
[NASA-CASE-XLE-00037] c28 N70-33372
- Apparatus for liquid spray cooling of turbine
blades
[NASA-CASE-XLE-00027] c33 N71-29152
- Process for welding compressor and turbine
blades to rotors and discs of jet engines
[NASA-CASE-LPW-10533-1] c15 N73-28515
- Thermal barrier coating system
[NASA-CASE-LPW-12554-1] c24 N76-23359
- Apparatus and method for reducing thermal stress
in a turbine rotor
[NASA-CASE-LPW-12232-1] c07 N77-18160
- Leading edge protection for composite blades
[NASA-CASE-LPW-12550-1] c24 N77-19170
- TURBINE ENGINES**
High speed, self-acting shaft seal --- for use
in turbine engines
[NASA-CASE-LPW-11274-1] c37 N75-21631
- Gas path seal --- for use with turbine engines
[NASA-CASE-LPW-12131-1] c37 N77-24498
- Dual cycle aircraft turbine engine
[NASA-CASE-LAR-11310-1] c07 N77-28118
- TURBINE PUMPS**
Pulsed energy power system for application of
combustible gases to turbine controlling ac
voltage generator
[NASA-CASE-MSC-13112] c03 N71-11057
- Portable cryogenic cooling system design
including turbine pump, cooling chamber, and
atomizer
[NASA-CASE-NFO-10467] c23 N71-26654
- Supersonic-combustion rocket
[NASA-CASE-LPW-11058-1] c20 N74-13502
- TURBINE WHEELS**
Locking device for retaining turbine rotor
blades on turbine wheel
[NASA-CASE-XNP-00816] c28 N71-28928
- Apparatus for welding blades to rotors
[NASA-CASE-LPW-10533-2] c37 N74-11300
- Blade retainer assembly
[NASA-CASE-LPW-12608-1] c07 N77-27116
- TURBINES**
Liquid-vapor interface seal design for turbine
rotating shafts including helical and
molecular pumps and liquid cooling of mercury
vapor
[NASA-CASE-XNP-02862-1] c15 N71-26294
- TURBOCOMPRESSORS**
Multistage multiple reentry axial flow reaction
turbine with reverse flow reentry ducting
[NASA-CASE-XLE-00170] c15 N70-36412
- TURBOFAN ENGINES**
Supersonic fan blading --- noise reduction in
turbofan engines
[NASA-CASE-LPW-11402-1] c07 N74-28226
- Noise suppressor --- for turbofan engine by
incorporating annular acoustically porous
elements in exhaust and inlet ducts
[NASA-CASE-LAR-11141-1] c07 N74-32418
- Noise suppressor for turbo fan jet engines
[NASA-CASE-ARC-10812-1] c07 N76-18131
- TURBOFANS**
Dual output variable pitch turbofan actuation
system
[NASA-CASE-LPW-12419-1] c07 N77-14025
- Reverse pitch fan with divided splitter
[NASA-CASE-LPW-12760-1] c07 N77-17059
- TURBOJET ENGINES**
Telescoping-spike supersonic nozzle for turbojet
or ramjet engines
[NASA-CASE-XLE-00005] c28 N70-39899
- Design and development of gas turbine combustion
unit with nozzle guide vanes for introducing
diluent air into combustion gases
[NASA-CASE-XLE-103477-1] c28 N71-20330
- Reduction of nitric oxide emissions from a
combustor
[NASA-CASE-ARC-10814-2] c25 N77-31260
- TURBOMACHINE BLADES**
Platform for a swing root turbomachinery blade
[NASA-CASE-LPW-12312-1] c07 N77-32148
- TURBOMACHINERY**
Blade vibration damping pins for turbomachinery
[NASA-CASE-XLE-00155] c28 N71-29154
- TURBOSHAFTS**
Remote-reading torque meter for use where high
horsepowers are transmitted at high rotative

- speeds
[NASA-CASE-XLE-00503] c14 N70-34818
High speed, self-acting shaft seal --- for use
in turbine engines
[NASA-CASE-LER-11274-1] c37 N75-21631
- TURBULENCE METERS**
Turbulence intensity indicator
[NASA-CASE-LAR-11833-1] c06 N76-31229
- TURBULENT FLOW**
Exhaust flow deflector --- for ducted gas flow
[NASA-CASE-LAR-11570-1] c34 N76-18364
System for measuring Reynolds in a turbulently
flowing fluid --- signal processing
[NASA-CASE-ARC-10755-2] c34 N76-27517
System for measuring three fluctuating velocity
components in a turbulently flowing fluid
[NASA-CASE-ARC-10974-1] c34 N77-27345
- TURBULENT WAKES**
Vortex attenuation method --- for multi-engine
aircraft
[NASA-CASE-LAR-12034-1] c02 N77-22045
- TURNSTILE ANTENNAS**
Flexible turnstile antenna system for reducing
nutations in spin-oriented satellites
[NASA-CASE-XNF-00442] c31 N71-10747
Broadband modified turnstile antenna for use in
space tracking and communications
[NASA-CASE-MSC-12209] c09 N71-24842
Turnstile slot antenna
[NASA-CASE-GSC-11428-1] c32 N74-20864
Turnstile and flared cone UHF antenna
[NASA-CASE-LAR-10970-1] c33 N76-14372
- TURRET**
Indexing mechanism for cathode array
substitution in electron beam tube
[NASA-CASE-NFO-10625] c09 N71-26182
- TWO BODY PROBLEM**
Instrument for measuring potentials on two
dimensional electric field plot
[NASA-CASE-XLA-08493] c10 N71-19421
- TWO DIMENSIONAL BODIES**
Two dimensional wedge/translating shroud nozzle
[NASA-CASE-LAR-11919-1] c07 N76-22202
Two-dimensional radiant energy array computers
and computing devices
[NASA-CASE-GSC-11839-1] c60 N77-14751
- TWO PHASE FLOW**
Solenoid two-step valve for bipropellant flow
rate control to rocket engine
[NASA-CASE-XMS-04890-1] c15 N70-22192
Two phase fluid pressurization system for
propellant tank
[NASA-CASE-MSC-12390] c27 N71-29155
Two-phase flow system with discrete, impinging
two-phase jets
[NASA-CASE-NFO-11556] c12 N72-25292
- TYPEWRITERS**
Guide for a typewriter
[NASA-CASE-NFS-15218-1] c37 N77-19457
- U**
- U BENDS**
Elbow forming in jacketed pipes while
maintaining separation between core shape and
jacket pipes
[NASA-CASE-XNP-10475] c15 N71-24679
U shaped heated tube for distillation and
purification of liquid metals
[NASA-CASE-XNP-08124-2] c06 N73-13129
- ULLAGE**
Radiation source and detection system for
measuring amount of liquid inside tanks
independently of liquid configuration
[NASA-CASE-MSC-12280] c27 N71-16348
- ULTRAHIGH FREQUENCIES**
Turnstile and flared cone UHF antenna
[NASA-CASE-LAR-10970-1] c33 N76-14372
Swept group delay measurement
[NASA-CASE-NFO-13909-1] c33 N77-17358
- ULTRAHIGH VACUUM**
Solid lubricant applied to porous roller
bearings prior to use in ultrahigh vacuum
[NASA-CASE-XLE-09527] c15 N71-17688
Calibration of vacuum gauges for measuring total
and partial pressures in ultrahigh vacuum region
[NASA-CASE-XGS-07752] c14 N73-30390
Ultrahigh vacuum gauge with two collector
electrodes
[NASA-CASE-LAR-02743] c14 N73-32324
In situ transfer standard for ultrahigh vacuum
gauge calibration
[NASA-CASE-LAR-10862-1] c35 N74-15092
- ULTRASONIC AGITATION**
Development of ultrasonic radiation equipment
for removing material from host surface and
vacuum apparatus for recovery of material
[NASA-CASE-NFO-11213] c15 N73-20514
- ULTRASONIC RADIATION**
Ultrasonic biomedical measuring and recording
apparatus --- for recording motion of internal
organs such as heart valves
[NASA-CASE-ARC-10597-1] c52 N74-20726
Biomedical ultrasonoscope
[NASA-CASE-ARC-10994-1] c52 N76-33835
EKG and ultrasonoscope display
[NASA-CASE-ARC-10994-2] c52 N77-15619
- ULTRASONIC TESTS**
Ultrasonic scanner for radial and flat panels
[NASA-CASE-NFS-20335-1] c35 N74-10415
Ultrasonic scanning system for in-place
inspection of brazed tube joints
[NASA-CASE-NFS-20767-1] c38 N74-15130
Method and apparatus for nondestructive testing
--- using high frequency arc discharges
[NASA-CASE-NFS-21233-1] c38 N74-15395
A CW ultrasonic bolt tensioning monitor
[NASA-CASE-LAR-12016-1] c32 N77-15236
A miniature implantable ultrasonic echosonometer
[NASA-CASE-ARC-11035-1] c52 N77-15621
- ULTRASONIC WAVE TRANSDUCERS**
Development of ultrasonic radiation equipment
for removing material from host surface and
vacuum apparatus for recovery of material
[NASA-CASE-NFO-11213] c15 N73-20514
Ultrasonic bone densitometer
[NASA-CASE-NFS-20994-1] c35 N75-12271
Reference apparatus for medical ultrasonic
transducer
[NASA-CASE-ARC-10753-1] c54 N75-27760
Ultrasonic calibration device --- for producing
changes in acoustic attenuation and phase
velocity
[NASA-CASE-LAR-11435-1] c35 N76-15432
- ULTRASONIC WELDING**
Ultrasonically bonded valve assembly
[NASA-CASE-NFO-13360-1] c37 N75-25185
- ULTRASONICS**
Ultrasonic wrench for applying vibratory energy
to mechanical fasteners
[NASA-CASE-NFS-20586] c15 N71-17686
- ULTRAVIOLET FILTERS**
Ultraviolet filter of thorium fluoride and
cryolite on quartz base
[NASA-CASE-XNF-02340] c23 N69-24332
Development of ultraviolet resonance lamp with
improved transmission of radiation
[NASA-CASE-ARC-10030] c09 N71-12521
- ULTRAVIOLET RADIATION**
Ultraviolet radiation resistant alkali-metal
silicate coatings for temperature control of
spacecraft
[NASA-CASE-IGS-04119] c18 N69-39979
Development of ultraviolet resonance lamp with
improved transmission of radiation
[NASA-CASE-ARC-10030] c09 N71-12521
Gas leak detection in evacuated systems using
ultraviolet radiation probe
[NASA-CASE-EHC-10034] c15 N71-24896
Phototropic composition of matter with
sensitivity to ultraviolet light and usable
for producing positive photographic images
[NASA-CASE-IGS-03736] c14 N72-22443
Transmitting and reflecting diffuser
[NASA-CASE-LAR-10385-3] c23 N73-32538
Transmitting and reflecting diffuser --- for
ultraviolet light
[NASA-CASE-LAR-10385-2] c70 N74-13436
Ultraviolet and thermally stable polymer
compositions
[NASA-CASE-ARC-10592-1] c27 N74-21156
Light shield and cooling apparatus --- high
intensity ultraviolet lamp
[NASA-CASE-LAR-10089-1] c34 N74-23066
Plane detector operable in presence of proton
radiation
[NASA-CASE-NFS-21577-1] c19 N74-29410

Method and apparatus for generating coherent radiation in the ultra-violet region and above by use of distributed feedback
[NASA-CASE-NFO-13346-1] c36 N76-29575

Ultraviolet and thermally stable polymer compositions
[NASA-CASE-ARC-10592-2] c27 N76-32315

ULTRAVIOLET REFLECTION
Composition and production method of alkali metal silicate paint with ultraviolet reflection properties
[NASA-CASE-IGS-04799] c18 N71-24183

Ultraviolet light reflective coating
[NASA-CASE-GSC-11786-1] c24 N76-24363

ULTRAVIOLET SPECTRA
Ultraviolet chromatographic detector for quantitative and qualitative analysis of compounds
[NASA-CASE-ECN-10756-1] c14 N72-25428

ULTRAVIOLET SPECTROMETERS
Concave grating spectrometer for use in near and vacuum ultraviolet regions
[NASA-CASE-XGS-01036] c14 N70-40003

Telespectrograph for analyzing upper atmosphere by tracking bodies reentering atmosphere at high velocities
[NASA-CASE-XLA-03273] c14 N71-18699

UMBILICAL CONNECTORS
Umbilical separator for rockets
[NASA-CASE-XNP-00425] c11 N70-38202

Remotely actuated quick disconnect mechanism for umbilical cables
[NASA-CASE-XLA-00711] c03 N71-12258

Remotely actuated quick disconnect for tubular umbilical conduits used to transfer fluids from ground to rocket vehicle
[NASA-CASE-XLA-01396] c03 N71-12259

Internal and external serpentine devices for performing physical operations around orbital space stations
[NASA-CASE-XNP-05344] c31 N71-16345

Breakaway multiwire electrical cable connector with particular application for umbilical type cables
[NASA-CASE-NFO-11140] c15 N72-17455

Gas operated quick disconnect coupling for umbilical connectors
[NASA-CASE-NFO-11202] c15 N72-25450

Deployable flexible tunnel
[NASA-CASE-NFS-22636-1] c37 N76-22540

UMBILICAL TOWERS
Emergency escape cabin system for launch towers
[NASA-CASE-IRS-02342] c05 N71-11199

UNDERWATER ENGINEERING
Ejectable underwater sound source recovery assembly
[NASA-CASE-LAR-10595-1] c35 N74-16135

UNDERWATER TESTS
Pressure regulator for space suit worn underwater to simulate space environment for testing and experimentation
[NASA-CASE-NFS-20332] c05 N72-20097

Underwater space suit pressure control regulator
[NASA-CASE-NFS-20332-2] c05 N73-25125

UNIFORM FLOW
Wind tunnel flow generation section
[NASA-CASE-ARC-10710-1] c09 N75-12969

UNLOADING
Bootstrap unloading circuits for sampling transducer voltage sources without drawing current
[NASA-CASE-XNP-05768] c09 N71-12516

UNMANNED SPACECRAFT
Device which separates and screens particles of soil samples for vidicon viewing in vacuum and reduced gravity environments
[NASA-CASE-XNP-09770-3] c11 N71-27036

UPPER ATMOSPHERE
Telespectrograph for analyzing upper atmosphere by tracking bodies reentering atmosphere at high velocities
[NASA-CASE-XLA-03273] c14 N71-18699

Development and operation of apparatus for sampling particulates in gases in upper atmosphere
[NASA-CASE-HQN-10037-1] c14 N73-27376

Rocket having barium release system to create ion clouds in the upper atmosphere
[NASA-CASE-LAR-10670-2] c15 N74-27360

URANIUM 235

Isotope separation using metallic vapor lasers
[NASA-CASE-NFO-13550-1] c36 N77-26477

UREAS

A reverse osmosis membrane of high urea rejection properties
[NASA-CASE-ARC-10980-1] c27 N77-18265

Aldehyde-containing urea-absorbing polysaccharides
[NASA-CASE-NFO-13620-1] c27 N77-30236

URINALYSIS

Automated fluid chemical analyzer for microchemical analysis of small quantities of liquids by use of selected reagents and analyzer units
[NASA-CASE-INP-09451] c06 N71-26754

Enzymatic luminescent bioassay method for determining bacterial levels in urine
[NASA-CASE-GSC-11092-2] c04 N73-27052

Automatic device for assaying urine on bacterial adenosine triphosphate content
[NASA-CASE-GSC-11169-2] c05 N73-32011

URINATION

Open type urine receptacle with tubular housing
[NASA-CASE-MSC-12324-1] c05 N72-22093

URINE

Determination of antimicrobial susceptibilities of infected urines without isolation
[NASA-CASE-GSC-12046-1] c52 N77-26797

UTERUS

A cervix-to-rectum measuring device in a radiation applicator for use in the treatment of cervical cancer
[NASA-CASE-GSC-12081-2] c52 N77-26796

V**V GROOVES**

Vee-notching device --- with adjustable carriage
[NASA-CASE-NFS-20730-1] c39 N74-13131

VACUUMS (CRYSTAL DEFECTS)

Bi-metallic junctions
[NASA-CASE-LFW-11573-1] c26 N77-28265

VACUUM

Hole mobility of deposited semiconductor films in vacuum utilizing thermal gradient
[NASA-CASE-IRS-04614] c15 N69-21460

Operating properties of superconducting magnet in vacuum environment
[NASA-CASE-INP-06503] c23 N71-29049

VACUUM APPARATUS

Null-type vacuum microbalance for measuring minute mechanical displacements
[NASA-CASE-IAC-00472] c15 N70-40180

Sealing evacuation port and evacuating vacuum container such as space jackets
[NASA-CASE-INP-03290] c15 N71-23256

Apparatus for determining volatile condensable material present in polymeric products
[NASA-CASE-XNP-09699] c06 N71-24607

Oil trap for preventing diffusion pump backstreaming into evacuated system
[NASA-CASE-GSC-10518-1] c15 N72-22489

Inductance device with vacuum insulation and materials of low gas entrapping capability
[NASA-CASE-LFW-10330-1] c09 N72-27226

Development of apparatus for producing metal powder particles of controlled size
[NASA-CASE-ILE-06461-2] c17 N72-28535

Portable vacuum probe surface sampler for sampling large surface areas with relatively light loading densities of microorganisms
[NASA-CASE-LAR-10623-1] c14 N73-30395

Servo valve
[NASA-CASE-LAR-11643-1] c37 N75-13268

Vacuum leak detector
[NASA-CASE-LAR-11237-1] c35 N75-19612

Apparatus for positioning modular components on a vertical or overhead surface
[NASA-CASE-LAR-11465-1] c37 N76-21554

VACUUM CHAMBERS

High-vacuum condenser tank for testing ion rocket engines
[NASA-CASE-XLE-00168] c11 N70-33278

Portable electron beam welding chamber
[NASA-CASE-LFW-11531] c15 N71-14932

Space environmental work simulator with portions of space suit mounted to vacuum chamber wall
[NASA-CASE-INP-07488] c11 N71-18773

VACUUM DEPOSITION

SUBJECT INDEX

Ionization control system design for monitoring separately located ion gage pressures on vacuum chambers
[NASA-CASE-XLE-00787] c14 N71-21090
Coherent light beam device and method for measuring gas density in vacuum chambers
[NASA-CASE-XER-11203] c14 N71-28994
Transferring liquid nitrogen through vacuum chamber to cryopanel
[NASA-CASE-LAR-10031] c15 N72-22484
Vacuum chamber with scale model of rocket engine base area of space vehicle
[NASA-CASE-MFS-20620] c11 N72-27262
Packless valve for use with evacuation chamber with adapter for attachment to vacuum line and vacuum pump
[NASA-CASE-LAR-10061-1] c15 N72-31483
Apparatus for analyzing gas samples in containers including vacuum chamber, mass spectrometer, and gas chromatography
[NASA-CASE-GSC-10903-1] c14 N73-12444
Design and development of test stand system for supporting test items in vacuum chamber
[NASA-CASE-MFS-21362] c11 N73-20267

VACUUM DEPOSITION

Deposition method for epitaxial beta SiC films having high degree of crystallographic perfection
[NASA-CASE-ERC-10120] c26 N69-33482
Describing apparatus used in vacuum deposition of thin film inductive windings for spacecraft microcircuitry
[NASA-CASE-XMP-01667] c15 N71-17647
Sputter proof evaporant source design for use in vacuum deposition of solid thin films on substrates
[NASA-CASE-XMP-06065] c15 N71-20395
Device for high vacuum film deposition with electromagnetic ion steering
[NASA-CASE-NPO-10331] c09 N71-26701
Preparation of dielectric coatings of variable dielectric constant by plasma polymerization
[NASA-CASE-ARC-10892-2] c27 N77-17245

VACUUM FURNACES

Apparatus for inserting and removing specimens from high temperature vacuum furnaces
[NASA-CASE-LPR-10841-1] c31 N74-27900

VACUUM GAGES

Simulating operation of thermopile vacuum gage tube at high and low pressures
[NASA-CASE-XLA-02758] c14 N71-18481
Calibration of vacuum gauges for measuring total and partial pressures in ultrahigh vacuum region
[NASA-CASE-XGS-07752] c14 N73-30390
Ionization gage for measuring ultrahigh vacuum levels
[NASA-CASE-XLA-05087] c14 N73-30391
In situ transfer standard for ultrahigh vacuum gage calibration
[NASA-CASE-LAR-10862-1] c35 N74-15092

VACUUM MELTING

Electric furnace for vacuum and zero gravity melting of high melting point materials during earth orbit
[NASA-CASE-MFS-20710] c11 N72-23215

VACUUM SYSTEMS

Shrink-fit vacuum system gas valve
[NASA-CASE-XES-00587] c15 N70-35087
Leakproof soft metal seal for use in very high vacuum systems operating at cryogenic temperatures
[NASA-CASE-XGS-02441] c15 N70-41629
Describing hot filament type Bayard-Alpert ionization gage with ion collector buried or removed from grid structure
[NASA-CASE-XLA-07424] c14 N71-18482
Describing sorption vacuum trap having housing with group of reentrant wall portions projecting into internal gas-pervious container filled with gas and vapor sorbent material
[NASA-CASE-XER-09519] c14 N71-18483
Vacuum leak detector
[NASA-CASE-LAR-11237-1] c35 N75-19612

VACUUM TUBES

Integrated structure vacuum tube
[NASA-CASE-ARC-10045-1] c31 N76-31365

VALVE

High impact pressure regulator having minimum

number of lightweight movable elements
[NASA-CASE-NFO-10175] c14 N71-18625

VALVES

Actuator using compressed gas as driving force to control valve handling large liquid flows
[NASA-CASE-XBQ-01208] c15 N70-35409
Two component valve assembly for cryogenic liquid transfer regulation
[NASA-CASE-XLE-00397] c15 N70-36492
High pressure four-way valve with O ring adapted to pass across inlet port
[NASA-CASE-XMP-00214] c15 N70-36908
Reinforcing beam system for highly flexible diaphragms in valves or pressure switches
[NASA-CASE-XMP-01962] c32 N70-41370
Multiple vortex amplifier system as fluid valve
[NASA-CASE-XMP-04709] c15 N71-15609
Throttle valve for regulating fluid flow volume
[NASA-CASE-XMP-09698] c15 N71-18580
Development and characteristics of high pressure control valve
[NASA-CASE-MSC-11010] c15 N71-19485
Valve seat with resilient support ring for venting valves subjected to high pressure sealing loads
[NASA-CASE-XKS-02582] c15 N71-21234
Positive locking check valve for stopping reversed flow
[NASA-CASE-XMS-09310] c15 N71-22706
Valve assembly for controlling simultaneously more than one fluid flow, and having stable qualities under loads
[NASA-CASE-XMS-05890] c09 N71-23191
Segmented sealing surface in valve seat
[NASA-CASE-NFO-10606] c15 N72-25451
Packless valve for use with evacuation chamber with adapter for attachment to vacuum line and vacuum pump
[NASA-CASE-LAR-10061-1] c15 N72-31483
Flow control valve --- for high temperature fluids
[NASA-CASE-NPO-11951-1] c37 N74-21065
Airlock
[NASA-CASE-MFS-20922-1] c18 N74-22136

VALVES

Design and characteristics of device for sensing solar radiation and providing spacecraft attitude control to maintain direction with respect to incident radiation
[NASA-CASE-XMP-05535] c14 N71-23040
Rotary vane attenuator with two stators and intermediary rotor, using resistive and orthogonally disposed cards
[NASA-CASE-NPO-11418-1] c14 N73-13420

VAPOR DEPOSITION

Deposition method for epitaxial beta SiC films having high degree of crystallographic perfection
[NASA-CASE-ERC-10120] c26 N69-33482
Device for producing high purity silicon carbide on carbon base by hydrogen reduction of silicon tetrachloride
[NASA-CASE-XLA-02057] c26 N70-40015
Water content in vapor deposition atmosphere for forming n-type and p-type junctions of zinc doped gallium arsenide
[NASA-CASE-XMP-01961] c26 N71-29156
Vapor deposition method for forming metallized tungsten contacts on silicon substrates
[NASA-CASE-GSC-10695-1] c09 N72-25259
Means of vapor deposition using electric current and evaporator filament
[NASA-CASE-LAR-10541-1] c15 N72-32487
Deposition of alloy films --- on irregularly shaped metal object
[NASA-CASE-LRW-11262-1] c27 N74-13270
System for depositing thin films
[NASA-CASE-MFS-20775-1] c31 N75-12161
Vapor deposition apparatus --- semiconductors and gallium arsenides
[NASA-CASE-BQN-10462] c25 N75-29192

VAPOR PHASES

Method and feed system for separating and orienting liquid and vapor phases of liquid propellants in zero gravity environment
[NASA-CASE-XLE-01182] c27 N71-15635
Gallium arsenide solar cell preparation by surface deposition of cuprous iodide on thin n-type polycrystalline layers and heating in iodine vapor

- [NASA-CASE-XNP-01960] c09 N71-23027
Mixed liquid and vapor phase analyzer design
with thermocouples for relative heat transfer
measurement
- [NASA-CASE-NFO-10691] c14 N71-26199
Electronic recording system for spatial mass
distribution of liquid rocket propellant
droplets or vapors ejected from high velocity
nozzles
- [NASA-CASE-NFO-10185] c10 N71-26339
Low gravity phase separator
- [NASA-CASE-MSC-14773-1] c31 N75-32262
- VAPOE PRESSURE**
Fuel tank pressure-relief device for venting
cryogenic liquid vapors through tubes with
porous plug
- [NASA-CASE-XLE-00288] c15 N70-34247
Vapor-liquid separator design with vapor driven
pump for separated liquid pumping for
application in propellant transfer
- [NASA-CASE-XNP-04042] c15 N71-23023
- VAPOR TRAPS**
Describing sorption vacuum trap having housing
with group of reentrant wall portions
projecting into internal gas-permeous
container filled with gas and vapor sorbent
material
- [NASA-CASE-XER-09519] c14 N71-18483
- VAPOEIZERS**
Vapor generating boiler system for turbine motor
- [NASA-CASE-XLE-00785] c33 N71-16104
- VAPOEIZING**
Apparatus and process for volumetrically
dispensing reagent quantities of volatile
chemicals for small batch reactions
- [NASA-CASE-NFO-10070] c15 N71-27372
Development of method for controlling vapor
content of gas
- [NASA-CASE-NFO-10633] c03 N72-28025
- VARACTOR DIODE CIRCUITS**
Phase modulator with tuned variable length
electrical lines including coupling and
varactor diode circuits
- [NASA-CASE-MSC-13201-1] c07 N71-28429
- VARACTOR DIODES**
Varactor microwave frequency mixing circuit
- [NASA-CASE-XGS-02171] c09 N69-24324
Multiple varactor for generating high
frequencies with high power and high
conversion efficiency
- [NASA-CASE-XNP-04958-1] c10 N71-26414
Millimeter wave pumped parametric amplifier
- [NASA-CASE-GSC-11617-1] c33 N74-32660
- VARIABLE CYCLE ENGINES**
Dual cycle aircraft turbine engine
- [NASA-CASE-LAR-11310-1] c07 N77-28118
- VARIABLE GEOMETRY STRUCTURES**
Aerospace configuration with low and high aspect
ratio variability for high and low speed flight
- [NASA-CASE-XLA-00142] c02 N70-33286
Variable geometry wind tunnel for testing
aircraft models at subsonic speeds
- [NASA-CASE-XLA-07430] c11 N72-22246
- VARIABLE PITCH PROPELLERS**
Dual output variable pitch turbofan actuation
system
- [NASA-CASE-LEW-12419-1] c07 N77-14025
- VARIABLE SWEEP WINGS**
Variable sweep wing configuration for supersonic
aircraft
- [NASA-CASE-XLA-00230] c02 N70-33255
Variable aspect ratio and variable sweep delta
wing planforms for supersonic aircraft
- [NASA-CASE-XLA-00221] c02 N70-33266
Supersonic aircraft configuration providing for
variable aspect ratio and variable sweep wings
- [NASA-CASE-XLA-00166] c02 N70-34178
Supersonic aircraft variable sweep wing planform
for varying aspect ratio
- [NASA-CASE-XLA-00350] c02 N70-38011
Development and characteristics of variable
sweep wing control system for supersonic
aircraft
- [NASA-CASE-XLA-03659] c02 N71-11041
Design of dual fuselage aircraft with pivoting
wing and horizontal stabilizer to permit
yawing of wing in flight for high speed
operation
- [NASA-CASE-ARC-10470-1] c02 N73-26005
- VARIABLE THRUST**
Variable thrust ion engine using thermal
decomposition of solid cesium compound to
produce propulsive vapor
- [NASA-CASE-XNP-00923] c28 N70-36802
Continuous variation of propellant flow and
thrust by application of liquid foam flow
theory to injection orifice
- [NASA-CASE-XLE-00177] c28 N70-40367
- VARIATIONS**
Gearing system for eliminating backlash and
filtering input torque fluctuations from high
inertia load
- [NASA-CASE-XGS-04227] c15 N71-21744
- VECTOR ANALYSIS**
Development of two force component measuring
device
- [NASA-CASE-XAC-04886-1] c14 N71-20439
- VECTOCARDIOGRAPHY**
Electromedical garment, applying
vectocardiologic type electrodes to human
torsos for data recording during physical
activity
- [NASA-CASE-XPR-10856] c05 N71-11189
- VEGETATION GROWTH**
Rotary plant growth accelerating apparatus ---
weightlessness
- [NASA-CASE-ARC-10722-1] c51 N75-25503
Remote sensing of vegetation and soil using
microwave ellipsometry
- [NASA-CASE-GSC-11976-1] c43 N76-23671
- VEHICLE WHEELS**
Resilient vehicle wheel for lunar surface travel
- [NASA-CASE-MPS-20400] c31 N71-18611
Resilient wheel design with woven wire tire and
abrasive treads for lunar surface vehicles
- [NASA-CASE-MPS-13929] c15 N71-27091
Omnidirectional wheel
- [NASA-CASE-MPS-21309-1] c37 N74-18125
Two speed drive system --- mechanical device for
changing speed on rotating vehicle wheel
- [NASA-CASE-MPS-20645-1] c37 N74-23070
Fifth wheel
- [NASA-CASE-FRC-10081-1] c37 N77-14477
- VELOCITY**
Velocity limiting safety system for motor driven
research vehicle
- [NASA-CASE-XLA-07473] c15 N71-24895
- VELOCITY MEASUREMENT**
Particle detector for measuring micrometeoroid
velocity in space
- [NASA-CASE-XLA-00495] c14 N70-41332
Superconductive accelerometer employing variable
force principle to determine acceleration of
bodies
- [NASA-CASE-XNP-01099] c14 N71-15969
Device for determining acceleration of gravity
by interferometric measurement of travel of
falling body
- [NASA-CASE-XNP-05844] c14 N71-17587
Describing laser Doppler velocimeter for
measuring mean velocity and turbulence of
fluid flow
- [NASA-CASE-MPS-20386] c21 N71-19212
Momentum-velocity analyzer for measuring minute
space particles
- [NASA-CASE-XNS-04201] c14 N71-22990
Development of combined velocimeter and
accelerometer based on color changes in liquid
crystalline material subjected to shear stresses
- [NASA-CASE-FRC-10292] c14 N72-25410
Instrument for measuring magnitude and direction
of flow velocity in flow field
- [NASA-CASE-LAR-10855-1] c14 N73-13415
Doppler shift system --- system for measuring
velocities of radiating particles
- [NASA-CASE-RQN-10740-1] c72 N74-19310
Velocity measurement system
- [NASA-CASE-MPS-23363-1] c35 N76-33469
Tachometer
- [NASA-CASE-MPS-23175-1] c35 N77-30436
- VELOCITY MODULATION**
Selector mechanism for mechanical separation and
discrimination of high velocity molecular
particles
- [NASA-CASE-XLE-01533] c11 N71-10777
Describing device for velocity control of
electromechanical drive mechanism of scanning
mirror of interferometer

- [NASA-CASE-XGS-03532] c14 N71-17627
- VENTILATORS**
Heat sterilizable patient ventilator
[NASA-CASE-WFO-13313-1] c54 N75-27761
- VENTING**
Fuel tank pressure-relief device for venting cryogenic liquid vapors through tubes with porous plug
[NASA-CASE-XLE-00288] c15 N70-34247
Venting device for liquid propellant storage tank using magnetic field to separate liquid and gaseous phases
[NASA-CASE-XLE-01449] c15 N70-41646
Valve seat with resilient support ring for venting valves subjected to high pressure sealing loads
[NASA-CASE-XKS-02582] c15 N71-21234
Venting device for pressurized space suit helmet to eliminate vomit expelled by crewmen
[NASA-CASE-XMS-09652-1] c05 N71-26333
Solid propellant rocket engine with venting system to control effective nozzle throat area
[NASA-CASE-XNP-03282] c28 N72-20758
- VENUS (PLANET)**
Space simulator with uniform test region radiation distribution, adapted to simulate Venus solar radiations
[NASA-CASE-XNF-00459] c11 N70-38675
- VERTICAL FLIGHT**
Aircraft indicator for pilot control of takeoff roll, climbout path and verticle flight path in poor visibility conditions
[NASA-CASE-XLA-00487] c14 N70-40157
- VERTICAL LANDING**
Vertically descending flight vehicle landing gear for rough terrain
[NASA-CASE-XNP-01174] c02 N70-41589
- VERTICAL TAKEOFF AIRCRAFT**
Mechanical stabilization system for VTOL aircraft
[NASA-CASE-XLA-06339] c02 N71-13422
Development of attitude control system for vertical takeoff aircraft using reaction nozzles displaced from various axes of aircraft
[NASA-CASE-XAC-08972] c02 N71-20570
- VERY HIGH FREQUENCIES**
VHF/UHF parasitic probe antenna for spacecraft communication
[NASA-CASE-XKS-09340] c07 N71-24614
- VESTS**
Lightweight life preserver without fastening devices
[NASA-CASE-XMS-00864] c05 N70-36493
- VIBRATION**
Three stage motion restraining mechanism for restraining and damping three dimensional vibrational movement of gimballed package during launch of spacecraft
[NASA-CASE-GSC-10306-1] c15 N71-24694
Vibration control of flexible bodies in steady accelerating environment
[NASA-CASE-LAR-10106-1] c15 N71-27169
- VIBRATION DAMPING**
Mercury filled pendulum damper for controlling bending vibration induced by wind effects
[NASA-CASE-LAR-10274-1] c14 N71-17626
Digital filter for reducing jitter in digital control systems
[NASA-CASE-WFO-11088] c08 N71-29034
Blade vibration damping pins for turbomachinery
[NASA-CASE-XLE-00155] c28 N71-29154
- VIBRATION EFFECTS**
Electromagnetic energy detection by thermal sensor with vibrating electrode
[NASA-CASE-XAC-10768] c09 N71-18830
Development of ultrasonic radiation equipment for removing material from host surface and vacuum apparatus for recovery of material
[NASA-CASE-XEC-11213] c15 N73-20514
Development of optical system for detecting defective components in rotating machinery with emphasis on bearing assemblies
[NASA-CASE-KSC-10752-1] c15 N73-27407
- VIBRATION ISOLATORS**
Shock and vibration damping device using temperature sensitive solid amorphous polymers
[NASA-CASE-XAC-11225] c14 N69-27486
Miniature vibration isolator utilizing elastic tubing material
[NASA-CASE-XLA-01019] c15 N70-40156
- Vibration damping system operating in low vacuum environment for spacecraft mechanisms
[NASA-CASE-XMS-01620] c23 N71-15673
Hermetically sealed vibration damper design for use in gimbal assembly of spacecraft inertial guidance system
[NASA-CASE-XSC-10959] c15 N71-26243
Tuned damped vibration absorber for mass vibrating in more than one degree of freedom for use with wind tunnel models
[NASA-CASE-LAR-10083-1] c15 N71-27006
Vibration isolation system, using coaxial helical compression springs
[NASA-CASE-WFO-11012] c15 N72-11391
Thrust-isolating mounting --- characteristics of support for loads mounted in spacecraft
[NASA-CASE-XFS-21680-1] c18 N74-27397
Shock absorbing mount for electrical components
[NASA-CASE-WFO-13253-1] c37 N75-18573
Thermal insulation attaching means --- adhesive bonding of felt vibration isolators under ceramic tiles
[NASA-CASE-XSC-12619-2] c16 N77-31237
- VIBRATION MEASUREMENT**
Development of system for measuring damping characteristics of structure or system subjected to random forces or influences
[NASA-CASE-XEC-10154-1] c14 N72-22440
Method and apparatus for vibration analysis utilizing the Mossbauer effect
[NASA-CASE-XNP-05882] c35 N75-27329
- VIBRATION METERS**
Fiber optic transducers for monitoring and analysis of vibration in aerospace vehicles and onboard equipment
[NASA-CASE-XNP-02433] c14 N71-10616
- VIBRATION MODE**
Function generators for producing complex vibration mode patterns used to identify vibration mode data
[NASA-CASE-LAR-10310-1] c10 N73-20253
- VIBRATION SIMULATORS**
Equipment for vibration testing of assemblies, components, and other articles
[NASA-CASE-GSC-11302-1] c14 N73-13416
- VIBRATION TESTS**
Electronic detection system for peak acceleration limits in vibrational testing of spacecraft components
[NASA-CASE-WFO-10556] c14 N71-27185
Fixture for supporting articles during vibration tests comprising integral annular unit
[NASA-CASE-XFS-20523] c14 N72-27412
Equipment for vibration testing of assemblies, components, and other articles
[NASA-CASE-GSC-11302-1] c14 N73-13416
Multiaxes vibration device for making vibration tests along orthogonal axes of test specimen
[NASA-CASE-XFS-20242] c14 N73-19421
- VIBRATIONAL SPECTRA**
Tuned damped vibration absorber for mass vibrating in more than one degree of freedom for use with wind tunnel models
[NASA-CASE-LAR-10083-1] c15 N71-27006
- VIDEO COMMUNICATION**
Circuitry for generating sync signals in FM communication systems including video information
[NASA-CASE-XNP-10830] c07 N71-11281
Monitoring circuit design for sampling circuit control and reduction of time-bandwidth in video communication systems
[NASA-CASE-XNP-02791] c07 N71-23026
Teletypewriter video communication system and apparatus
[NASA-CASE-XNP-06611] c07 N71-26102
Sampling video compression system
[NASA-CASE-XEC-10984-1] c32 N77-24328
- VIDEO DATA**
TV camera output signal control system for digital spacecraft communication
[NASA-CASE-XNP-01472] c14 N70-41807
Transient video signal tape recorder with expanded playback
[NASA-CASE-XEC-10003-1] c09 N71-25866
Restoration and improvement of demodulated facsimile video signals
[NASA-CASE-GSC-10185-1] c07 N72-12081

- Dual digital video switcher
[NASA-CASE-KSC-10782-1] c33 N75-30431
- VIDEO EQUIPMENT**
Video signal processing system for sampling video brightness levels
[NASA-CASE-NFO-10140] c07 N71-24742
Video sync processor with phase locked system
[NASA-CASE-KSC-10002] c10 N71-25865
Teletypewriter video communication system and apparatus
[NASA-CASE-XNP-06611] c07 N71-26102
Video signal enhancement of signal component representing brightness of scene element in low contrast
[NASA-CASE-NFO-10343] c07 N71-27341
Circuitry for high input impedance video processor with high noise immunity
[NASA-CASE-NFO-10199] c09 N72-17156
Electronic video editor for switching video input signals to common output channel
[NASA-CASE-KSC-10003] c10 N73-13235
Video tape recorder with scan conversion playback for color television signals
[NASA-CASE-NFO-10166-1] c07 N73-22076
Scan converting video tape recorder
[NASA-CASE-NFO-10166-2] c35 N76-16391
Stack plane visualization system
[NASA-CASE-LAR-11675-1] c45 N76-17656
- VIDICONS**
Operation of vidicon tube for scanning spatial charge density pattern
[NASA-CASE-XNP-06028] c09 N71-23189
Device which separates and screens particles of soil samples for vidicon viewing in vacuum and reduced gravity environments
[NASA-CASE-XNP-09770-3] c11 N71-27036
- VINYL POLYMERS**
Method of producing output voltage from photovoltaic cell using poly-N-vinyl carbazole complexed with iodine
[NASA-CASE-NFO-10373] c03 N71-18698
Heat resistant polymers of oxidized styrylphosphine
[NASA-CASE-MSC-14903-1] c27 N76-28425
- VINYLDIENE**
Preparation of dicyanoacetylene and vinylidene copolymers using organic compounds
[NASA-CASE-XNP-03250] c06 N71-23500
- VIRUSES**
Water system virus detection
[NASA-CASE-MSC-16098-1] c51 N77-24755
- VISCOELASTICITY**
Automated ball rebound resilience test equipment for determining viscoelastic properties of polymers
[NASA-CASE-XLA-08254] c14 N71-26161
Development and characteristics of parallel plate viscometer for determination of absolute viscosity of liquids and viscoelastic materials
[NASA-CASE-NFO-11387] c14 N73-14429
Shock absorbing mount for electrical components
[NASA-CASE-NFO-13253-1] c37 N75-18573
- VISCORETERS**
Describing instrument capable of measuring true shear viscosity of liquids and viscoelastic materials
[NASA-CASE-XNP-09462] c14 N71-17584
Development and characteristics of parallel plate viscometer for determination of absolute viscosity of liquids and viscoelastic materials
[NASA-CASE-NFO-11387] c14 N73-14429
- VISCOSITY**
Low density and low viscosity magnetic propellant for use under zero gravity conditions
[NASA-CASE-XIE-01512] c12 N70-40124
- VISCOUS DAMPING**
Shock and vibration damping device using temperature sensitive solid amorphous polymers
[NASA-CASE-XAC-11225] c14 N69-27486
Design and operation of viscous pendulum damper
[NASA-CASE-XIA-02079] c12 N71-16894
Mercury filled pendulum damper for controlling bending vibration induced by wind effects
[NASA-CASE-LAR-10274-1] c14 N71-17626
- VISIBILITY**
Controlled visibility device for simulating poor visibility conditions in training pilots in instrument landing and flight procedures
[NASA-CASE-IFR-04147] c11 N71-10748
- VISORS**
Anti-fog composition --- for prevention of fogging on surfaces such as space helmet visors and windshields
[NASA-CASE-MSC-13530-2] c23 N75-14834
- VISUAL ACUITY**
Multiparameter vision testing apparatus
[NASA-CASE-MSC-13601-2] c54 N75-27759
- VISUAL CONTROL**
Visual target luminaires for retrofire attitude control
[NASA-CASE-XMS-12158-1] c31 N69-27499
- VISUAL FIELDS**
Automated visual sensitivity tester for determining visual field sensitivity and blind spot size
[NASA-CASE-ARC-10329-1] c05 N73-26072
Visual examination apparatus
[NASA-CASE-RE-ARC-10329-2] c52 N76-30793
Binocular device for displaying numerical information in field of view
[NASA-CASE-LAR-11782-1] c74 N77-20882
- VISUAL PERCEPTION**
High pressure liquid flow sight assembly for wide temperature range applications including cryogenic fluids
[NASA-CASE-XLE-02998] c14 N70-42074
- VISUAL STIMULI**
Reaction tester for testing reaction to light stimuli
[NASA-CASE-MSC-13604-1] c05 N73-13114
- VOICE COMMUNICATION**
Position locating system for remote aircraft using voice communication and digital signals
[NASA-CASE-GSC-10087-2] c21 N71-13958
Earth satellite relay station for frequency multiplexed voice transmission
[NASA-CASE-GSC-10118-1] c07 N71-24621
Voice operated receiving and transmitting system for use in protective suits
[NASA-CASE-KSC-10164] c07 N71-33108
Technique for recovery of voice data from heat damaged magnetic tape
[NASA-CASE-MSC-14219-1] c32 N74-27612
Filtering device --- removing electromagnetic noise from voice communication signals
[NASA-CASE-MPS-22729-1] c32 N76-21366
Real time analysis of voiced sounds
[NASA-CASE-NFO-13465-1] c32 N76-31372
- VOICE DATA PROCESSING**
Digital communication system
[NASA-CASE-MSC-13912-1] c32 N74-30524
- VOLATILITY**
Apparatus for determining volatile condensable material present in polymeric products
[NASA-CASE-XNP-09699] c06 N71-24607
- VOLT-AMPERE CHARACTERISTICS**
Simulating voltage-current characteristic curves of solar cell panel with different operational parameters
[NASA-CASE-XMS-01554] c10 N71-10578
The dc-to-dc converters employing staggered-phase power switches with two-loop control
[NASA-CASE-NFO-13512-1] c33 N77-10428
Cable fault locator
[NASA-CASE-KSC-10899-1] c33 N77-28394
- VOLTAGE AMPLIFIERS**
Increasing power conversion efficiency of electronic amplifiers by power supply switching
[NASA-CASE-XMS-00945] c09 N71-10798
Bootstrap unloading circuits for sampling transducer voltage sources without drawing current
[NASA-CASE-XNP-09768] c09 N71-12516
RC networks with voltage amplifier, RC input circuit, and positive feedback
[NASA-CASE-ARC-10020] c10 N72-17172
Wide range analog to digital converter with variable gain amplifier
[NASA-CASE-NFO-11018] c08 N72-21200
- VOLTAGE CONVERTERS (DC TO DC)**
Regulated dc-to-dc converter for voltage step-up or step-down with input-output isolation
[NASA-CASE-HQN-10792-1] c33 N74-11049
The dc-to-dc converters employing staggered-phase power switches with two-loop control
[NASA-CASE-NFO-13512-1] c33 N77-10428

Inrush current limiter
[NASA-CASE-GSC-11789-1] c33 N77-14333

A regulated high efficiency, lightweight capacitor-diode multiplier DC to DC converter
[NASA-CASE-LEW-12791-1] c33 N77-24385

Phase substitution of spare converter for a failed one of parallel phase staggered converters
[NASA-CASE-NFO-13812-1] c33 N77-30365

VOLTAGE GENERATORS

Pulsed energy power system for application of combustible gases to turbine controlling ac voltage generator
[NASA-CASE-MSC-13112] c03 N71-11057

Biotelemetry apparatus with dual voltage generators for implanting in animals
[NASA-CASE-XAC-05706] c05 N71-12342

Transistorized circuit for producing multiple slope voltage sweep
[NASA-CASE-XMS-03542] c09 N71-28926

Inductive-capacitive loops as load insensitive power converters
[NASA-CASE-ERC-10268] c09 N72-25252

VOLTAGE REGULATORS

Regulated dc to dc converter
[NASA-CASE-IGS-03429] c03 N69-21330

Power control switching circuit using low voltage semiconductor controlled rectifiers for high voltage isolation
[NASA-CASE-INP-02713] c10 N69-39888

Automatic measuring and recording of gain and zero drift characteristics of electronic amplifier
[NASA-CASE-XMS-05562-1] c09 N69-39986

Automatic control of voltage supply to direct current motor
[NASA-CASE-XMS-04215-1] c09 N69-39987

Design, development, and operating principles of power supply with starting circuit which is independent of voltage regulator
[NASA-CASE-XMS-01991] c09 N71-21449

High voltage divider system for attenuating high voltages to convenient levels suitable for introduction to measuring circuits
[NASA-CASE-XLE-02008] c09 N71-21583

Power supply with overload protection for series stage transistor
[NASA-CASE-XMS-00913] c10 N71-23543

Voltage controlled, variable frequency relaxation oscillator with MOSFET variable current feed
[NASA-CASE-GSC-10022-1] c10 N71-25882

Design and development of buck-boost voltage regulator circuit with additive or subtractive alternating current impressed on variable direct current source voltage
[NASA-CASE-GSC-1C735-1] c10 N71-26085

Voltage range selection apparatus for sensing and applying voltages to electronic instruments without loading signal source
[NASA-CASE-XMS-06497] c14 N71-26244

Dissipative voltage regulator system for minimizing heat dissipation
[NASA-CASE-GSC-10891-1] c10 N71-26626

Power point tracker for maintaining optimal output voltage of power source
[NASA-CASE-GSC-10376-1] c14 N71-27407

Microwave power divider for providing variable output power to output waveguide in fixed waveguide system
[NASA-CASE-NFC-11031] c07 N71-33606

Relay controlled voltage switching unit for scanning circuitry of star tracker
[NASA-CASE-NFO-11253] c09 N72-17157

Switching type voltage regulator with relatively simple circuit arrangement
[NASA-CASE-LEW-11005-1] c09 N72-21243

Inductive-capacitive loops as load insensitive power converters
[NASA-CASE-ERC-10268] c09 N72-25252

Regulated dc-to-dc converter for voltage step-up or step-down with input-output isolation
[NASA-CASE-HQN-16792-1] c33 N74-11049

Overvoltage protection network
[NASA-CASE-ARC-10197-1] c33 N74-17929

Low distortion automatic phase control circuit --- voltage controlled phase shifter
[NASA-CASE-MPS-21671-1] c33 N74-22885

Voltage monitoring system
[NASA-CASE-KSC-10736-1] c33 N75-19521

A regulated high efficiency, lightweight capacitor-diode multiplier DC to DC converter
[NASA-CASE-LEW-12791-1] c33 N77-24385

VOLUNTARIES

Voltage monitoring system
[NASA-CASE-KSC-10736-1] c33 N75-19521

VOLUMETRIC ANALYSIS

Volumetric direct nuclear pumped laser
[NASA-CASE-LAB-12183-1] c36 N77-21424

VOMITING

Venting device for pressurized space suit helmet to eliminate vomit expelled by crewmen
[NASA-CASE-XMS-09652-1] c05 N71-26333

VORTEX BREAKDOWN

Wingtip vortex dissipator for aircraft
[NASA-CASE-LAB-11645-1] c02 N77-10001

VORTEX GENERATORS

Multiple vortex amplifier system as fluid valve
[NASA-CASE-IMP-04709] c15 N71-15609

Smokestack mounted airfoil
[NASA-CASE-LAB-11669-1] c34 N76-13419

Vortex attenuation method --- for multi-engine aircraft
[NASA-CASE-LAB-12034-1] c02 N77-22045

Vortex generator for controlling the dispersion of effluents in a flowing liquid
[NASA-CASE-LAB-12045-1] c34 N77-24423

VORTICES

Vortex-lift roll-control device
[NASA-CASE-LAB-11868-2] c08 N77-31176

VULCANIZING

Method for compression molding of thermosetting plastics utilizing a temperature gradient across the plastic to cure the article
[NASA-CASE-LAB-10489-1] c31 N74-18124

W

WAFERS

Separation of semiconductor wafer into chips bounded by scribe lines
[NASA-CASE-ERC-10138] c26 N71-14354

An improved method and apparatus for use in examining the lattice of a semiconductor wafer by X-ray diffraction
[NASA-CASE-MPS-23315-1] c76 N76-32029

WALL TEMPERATURE

Thermocouple apparatus for measuring wall temperatures in regeneratively cooled rocket engines having thin walled cooling passages
[NASA-CASE-XLE-05230-2] c14 N73-13417

Structural heat pipe --- for spacecraft wall thermal insulation system
[NASA-CASE-GSC-11619-1] c34 N75-12222

WALLS

Metal ribbon wrapped outer wall for regeneratively cooled combustion chamber
[NASA-CASE-XLE-00164] c15 N70-36411

WARNING SYSTEMS

Alarm system design for monitoring one or more relay circuits
[NASA-CASE-XMS-10984-1] c10 N71-19417

Unsaturating magnetic core transformer design with warning signal for electrical power processing equipment
[NASA-CASE-ERC-10125] c09 N71-24893

Electrical failure detector in solid rocket propellant motor insulation against thermal degradation by fuel grain
[NASA-CASE-IMP-03968] c14 N71-27186

Device for generating and controlling combustion products for testing of fire detection system
[NASA-CASE-GSC-11095-1] c14 N72-10375

Vertically stacked collinear array of independently fed omnidirectional antennas for use in collision warning systems on commercial aircraft
[NASA-CASE-LAB-10545-1] c09 N72-21244

Development and operating principles of collision warning system for aircraft accident prevention
[NASA-CASE-HQN-10703] c21 N73-13643

Pilot warning indicator system of intruder aircraft
[NASA-CASE-ERC-10226-1] c14 N73-16483

Silent alarm system for multiple room facility or school

- [NASA-CASE-WFO-11307-1] c10 N73-30205
Development and characteristics of electronic signalling system and data processing equipment for warning systems to avoid midair collisions between aircraft
- [NASA-CASE-LAF-10717-1] c21 N73-30641
Inverter ratio failure detector
- [NASA-CASE-WFO-13160-1] c35 N74-18090
Passive intrusion detection system
- [NASA-CASE-WFO-13804-1] c35 N77-19390
WASTE DISPOSAL
- Fecal waste disposal container
- [NASA-CASE-XMS-06761] c05 N69-23192
Airlock for waste transferal from pressurized enclosure aboard space vehicle to waste receiver at negative pressure
- [NASA-CASE-MFS-20922] c31 N72-20840
Pressurized tank for feeding liquid waste into processing equipment
- [NASA-CASE-LAR-10365-1] c05 N72-27102
Reduced gravity fecal collector seat and urinal
- [NASA-CASE-MFS-22102-1] c54 N74-20725
Airlock
- [NASA-CASE-MFS-20922-1] c18 N74-22136
Automatic liquid inventory collecting and dispensing unit
- [NASA-CASE-LAR-11071-1] c35 N75-19611
Automatic bio waste sampling
- [NASA-CASE-MSC-14640-1] c54 N76-14804
A process of forming catalytic surfaces for oxidation reactions
- [NASA-CASE-MSC-14831-1] c25 N76-23387
WASTE ENERGY UTILIZATION
- Pyrolysis system and process --- recovering energy from solid wastes containing hydrocarbons
- [NASA-CASE-MSC-12669-1] c44 N76-16621
WASTE WATER
- Process for purification of waste water produced by a Kraft process pulp and paper mill
- [NASA-CASE-WFO-13847-2] c85 N77-17949
Water system virus detection
- [NASA-CASE-MSC-16098-1] c51 N77-24755
WATER
- Variable water load for dissipating large amounts of electrical power during high voltage power supply tests
- [NASA-CASE-IMP-05381] c09 N71-20842
Gas chromatographic method for determining water in nitrogen tetroxide rocket propellant
- [NASA-CASE-WFO-10230] c06 N72-17094
Hydrogen rich gas generator
- [NASA-CASE-WFO-13342-1] c37 N76-16446
Solar hydrogen generator
- [NASA-CASE-LAR-11361-1] c44 N77-22607
Remote water monitoring system
- [NASA-CASE-LAR-11973-1] c43 N77-28563
WATER FLOW
- Potable water dispenser
- [NASA-CASE-MFS-21115-1] c54 N74-12779
WATER INJECTION
- Reentry communication by injection of water droplets into plasma layer surrounding space vehicle
- [NASA-CASE-XLA-01552] c07 N71-11284
WATER LANDING
- Parachute system for lowering manned spacecraft from post-reentry to ocean landing
- [NASA-CASE-XLA-00195] c02 N70-38009
Spacecraft design with single point aerodynamic and hydrodynamic stability for emergency transport of men from space station to splashdown
- [NASA-CASE-MSC-13281] c31 N72-18859
WATER MANAGEMENT
- Description of electrical equipment and system for purification of waste water by producing silver ions for bacterial control
- [NASA-CASE-MSC-10960-1] c03 N71-24718
Solar-powered pump
- [NASA-CASE-WFO-13567-1] c44 N76-29701
WATER POLLUTION
- Utilization of solar radiation by solar still for converting salt and brackish water into potable water
- [NASA-CASE-XMS-04533] c15 N71-23086
Portable tester for monitoring bacterial contamination by adenosine triphosphate light reaction
- [NASA-CASE-GSC-10879-1] c14 N72-25413
WATER RECLAMATION
- Potable water reclamation from human wastes in zero-G environment
- [NASA-CASE-XLA-03213] c05 N71-11207
Iodine generator for reclaimed water purification
- [NASA-CASE-MSC-14632-1] c54 N75-25594
Water system virus detection
- [NASA-CASE-MSC-16098-1] c51 N77-24755
WATER TEMPERATURE
- Differential thermopile for measuring cooling water temperature rise
- [NASA-CASE-XAC-00812] c14 N71-15598
WATER TREATMENT
- Description of electrical equipment and system for purification of waste water by producing silver ions for bacterial control
- [NASA-CASE-MSC-10960-1] c03 N71-24718
Method of preparing water purification membranes --- polymerization of allyl amine as thin films in plasma discharge
- [NASA-CASE-ARC-10643-1] c25 N75-12087
Water purification process
- [NASA-CASE-ARC-10643-2] c51 N75-13506
Iodine generator for reclaimed water purification
- [NASA-CASE-MSC-14632-1] c54 N75-25594
Air removal device --- for purification of water under zero gravity conditions
- [NASA-CASE-XLA-8914-2] c34 N76-23522
Process for purification of waste water produced by a Kraft process pulp and paper mill
- [NASA-CASE-WFO-13847-2] c85 N77-17949
A reverse osmosis membrane of high urea rejection properties
- [NASA-CASE-ARC-10980-1] c27 N77-18265
Water system virus detection
- [NASA-CASE-MSC-16098-1] c51 N77-24755
WATER VAPOR
- Equipment for measuring partial water vapor pressure in gas tank
- [NASA-CASE-XMS-01618] c14 N71-20741
WATERPROOFING
- Glass-to-metal seals comprising relatively high expansion metals
- [NASA-CASE-LEW-10698-1] c37 N74-21063
WAVE AMPLIFICATION
- Distributed feedback acoustic surface wave oscillator
- [NASA-CASE-WFO-13673-1] c71 N77-26919
WAVE FRONT RECONSTRUCTION
- Recording and reconstructing focused image holograms
- [NASA-CASE-BRC-10017] c16 N71-15567
WAVE GENERATION
- Wind tunnel air flow modulating device and apparatus for selectively generating wave motion in wind tunnel airstream
- [NASA-CASE-XLA-00112] c11 N70-33287
Linear sawtooth voltage wave generator with transistor timing circuit having capacitor and zener diode feedback loops
- [NASA-CASE-XMS-01315] c09 N70-41675
Sign wave generation simulator for variable amplitude, frequency, damping, and phase pulses for oscilloscope display
- [NASA-CASE-WFO-10251] c10 N71-27365
Wideband generator for producing sine wave quadrature and second harmonic of input signal
- [NASA-CASE-WFO-11133] c10 N72-20223
Material suspension within an acoustically excited resonant chamber --- at near weightless conditions
- [NASA-CASE-WFO-13263-1] c12 N75-24774
WAVE REFLECTION
- Surface defect detection by reflected microwave radiation pattern
- [NASA-CASE-ARC-10009-1] c15 N71-17822
Millimeter wave antenna system for spacecraft use
- [NASA-CASE-GSC-10949-1] c07 N71-28965
WAVE SCATTERING
- Device and method for determining X ray reflection efficiency, scattering properties, and surface finish of optical surfaces
- [NASA-CASE-MFS-20243] c23 N73-13662
WAVEFORMS
- Variable frequency magnetic coupled multivibrator with output signal of constant amplitude and waveform
- [NASA-CASE-XGS-00131] c09 N70-38995

- Cathode ray oscilloscope for analyzing electrical waveforms representing amplitude distribution of time function
[NASA-CASE-XNP-01383] c09 N71-10659
- Peak polarity selector for monitoring waveforms
[NASA-CASE-FRC-10010] c10 N71-24862
- Development of family of frequency to amplitude converters for frequency analysis of complex input signal waveforms
[NASA-CASE-MSC-12395] c09 N72-25257
- Device for performing statistical time-series analysis of complex electrical signal waveforms
[NASA-CASE-MSC-12428-1] c10 N73-25240
- Low distortion receiver for bi-level baseband FCM waveforms
[NASA-CASE-MSC-14557-1] c32 N76-16249
- Lightning current waveform measuring system
[NASA-CASE-KSC-11018-1] c33 N77-21320
- Speech analyzer
[NASA-CASE-GSC-11898-1] c32 N77-30309
- WAVEGUIDE ANTENNAS**
- Planar array circularly polarized antenna with wall slot excitation
[NASA-CASE-NFO-10301] c07 N72-11148
- Dielectric loaded aperture antenna with directive radiation pattern from waveguide
[NASA-CASE-LAR-11084-1] c09 N73-12216
- WAVEGUIDE FILTERS**
- Microwave power divider for providing variable output power to output waveguide in fixed waveguide system
[NASA-CASE-NFO-11031] c07 N71-33606
- WAVEGUIDE WINDOWS**
- Broadband microwave waveguide window to compensate dielectric material filling
[NASA-CASE-XNP-08880] c09 N71-24808
- WAVEGUIDES**
- Dual waveguide mode source for controlling amplitudes of two modes
[NASA-CASE-XNP-03134] c07 N71-10676
- Design of folded traveling wave maser structure
[NASA-CASE-XNP-05219] c16 N71-15550
- Quasi-optical microwave circuit with dielectric body for use with oversize waveguides
[NASA-CASE-ERC-10011] c07 N71-29065
- Microwave waveguide mixer
[NASA-CASE-ERC-10179] c17 N72-20141
- Waveguide, thin film window and microwave irises
[NASA-CASE-LAR-10513-1] c07 N72-25170
- Development of thin film microwave iris installed in microwave waveguide transverse to flow of energy in waveguide
[NASA-CASE-LAR-10511-1] c09 N72-29172
- Resonant waveguide stark cell --- using microwave spectrometers
[NASA-CASE-LAR-11352-1] c33 N75-26245
- Diffused waveguiding capillary tube with distributed feedback for a gas laser
[NASA-CASE-NFO-13544-1] c36 N76-18428
- WAVELENGTHS**
- Method and apparatus using temperature control for wavelength tuning of liquid lasers
[NASA-CASE-ERC-10187] c16 N69-31343
- Multiple wavelength radiation measuring instrument for determining hot body or gas temperature
[NASA-CASE-XIE-00011] c14 N70-41946
- Optical system for selecting particular wavelength light beams from multiple wavelength light source
[NASA-CASE-ERC-10248] c14 N72-17323
- Development of radiant energy sensor to detect the radiant energy wavelength bands from portions of radiating body
[NASA-CASE-ERC-10174] c14 N72-25409
- Dual wavelength system for monitoring film deposition
[NASA-CASE-MFS-20675] c26 N73-26751
- Dual wavelength scanning Doppler velocimeter --- without perturbation of flow fields
[NASA-CASE-ARC-10637-1] c35 N75-16783
- Diatonic infrared gasdynamic laser --- for producing different wavelengths
[NASA-CASE-ARC-10370-1] c36 N75-31426
- Two wavelength double pulse tunable dye laser
[NASA-CASE-LAR-12072-1] c36 N77-10517
- WEAR**
- High temperature resistant cermet and ceramic compositions --- for use in thermionic converters or diodes
[NASA-CASE-NFO-13690-1] c27 N76-13294
- WEATHERPROOFING**
- Weatherproof helix antenna
[NASA-CASE-XKS-08485] c07 N71-19493
- WEBS (SHEETS)**
- Method and apparatus for measuring web material wound on a reel
[NASA-CASE-GSC-11902-1] c38 N77-17495
- WEBS (SUPPORTS)**
- Apparatus for assembling space structure
[NASA-CASE-MFS-23579-1] c12 N77-31213
- WEDGES**
- Method and apparatus for splitting a beam of energy
[NASA-CASE-GSC-12083-1] c36 N76-15451
- Two dimensional wedge/translating shroud nozzle
[NASA-CASE-LAR-11919-1] c07 N76-22202
- WEIGHT (MASS)**
- Suspended mass oscillation damper based on impact energy absorption for damping wind induced oscillations of tall stacks, antennas, and umbilical towers
[NASA-CASE-LAR-10193-1] c15 N71-27146
- WEIGHT INDICATORS**
- Device for monitoring a change in mass in varying gravimetric environments
[NASA-CASE-MFS-21556-1] c35 N74-26945
- WEIGHT MEASUREMENT**
- Weighing and recording device for obtaining precise automatic record of small changes in force
[NASA-CASE-XLA-02605] c14 N71-10773
- Device for monitoring a change in mass in varying gravimetric environments
[NASA-CASE-MFS-21556-1] c35 N74-26945
- WEIGHTLESSNESS**
- Apparatus for cryogenic liquid storage with heat transfer reduction and for liquid transfer at zero gravity conditions
[NASA-CASE-XIE-00345] c15 N70-38020
- Liquid-gas separator adapted for use in zero gravity environment - drawings
[NASA-CASE-XMS-01624] c15 N70-40062
- Expulsion and measuring device for determining quantity of liquid in tank under conditions of weightlessness
[NASA-CASE-XMS-01546] c14 N70-40233
- Collapsible auxiliary tank for restarting liquid propellant rocket motors under zero gravity
[NASA-CASE-XNF-01390] c28 N70-41275
- Absorbent apparatus for separating gas from liquid-gas stream used in environmental control under zero gravity conditions
[NASA-CASE-XMS-01492] c05 N70-41297
- Potable water reclamation from human wastes in zero-G environment
[NASA-CASE-XLA-03213] c05 N71-11207
- Describing apparatus for separating gas from cryogenic liquid under zero gravity and for venting gas from fuel tank
[NASA-CASE-XIE-00586] c15 N71-15968
- Cable suspension and inclined walkway system for simulating reduced or zero gravity environments
[NASA-CASE-XLA-01787] c11 N71-16028
- Development of apparatus for simulating zero gravity conditions
[NASA-CASE-MFS-12750] c27 N71-16224
- Quick disconnect latch and handle combination for mounting articles on walls or supporting bases in spacecraft under zero gravity conditions
[NASA-CASE-MFS-11132] c15 N71-17649
- Gauge for measuring quantity of liquid in spherical tank in reduced gravity
[NASA-CASE-XMS-06236] c14 N71-21007
- Zero gravity apparatus utilizing pneumatic decelerating means to create payload subjected to zero gravity conditions by dropping its height
[NASA-CASE-XNF-06515] c14 N71-23227
- Method and apparatus for applying compressional forces to skeletal structure of subject to simulate force during ambulatory conditions
[NASA-CASE-ARC-10100-1] c05 N71-24738

- Device which separates and screens particles of soil samples for vidicon viewing in vacuum and reduced gravity environments
[NASA-CASE-IMP-09770-3] c11 N71-27036
- Description of method for making homogeneous foamed materials in weightless environment using materials having different physical properties
[NASA-CASE-IMP-C9902] c15 N72-11387
- Manipulator for remote handling in zero gravity environment
[NASA-CASE-MFS-14405] c15 N72-28495
- Apparatus for mixing two or more liquids under zero gravity conditions
[NASA-CASE-LAR-10195-1] c15 N73-19458
- Zero gravity liquid transfer device, using spiral shaped screen
[NASA-CASE-RSC-10626] c14 N73-27378
- Reduced gravity fecal collector seat and urinal
[NASA-CASE-MFS-22102-1] c54 N74-20725
- Apparatus for conducting flow electrophoresis in the substantial absence of gravity
[NASA-CASE-MFS-21394-1] c34 N74-27744
- Rotary plant growth accelerating apparatus --- weightlessness
[NASA-CASE-ARC-10722-1] c51 N75-25503
- Fluid control apparatus and method
[NASA-CASE-LAR-11110-1] c34 N75-26282
- Method for manufacturing mirrors in zero gravity environment
[NASA-CASE-MSC-12611-1] c12 N76-15189
- Air removal device --- for purification of water under zero gravity conditions
[NASA-CASE-ILA-8914-2] c34 N76-23522
- Zero gravity separator
[NASA-CASE-LAR-10344-1] c35 N76-33470
- Fluid mass sensor for a zero gravity environment
[NASA-CASE-MSC-14653-1] c35 N77-19385
- Method of crystallization --- in gravity-free environments
[NASA-CASE-MFS-23001-1] c76 N77-32919
- WEIGHTLESSNESS SIMULATION**
- Reduced gravity liquid configuration simulator to study propellant behavior in rocket fuel tanks
[NASA-CASE-ILE-02624] c12 N69-39988
- Apparatus for measuring human body mass in zero or reduced gravity environment
[NASA-CASE-IHS-03371] c05 N70-42000
- Harness assembly adapted to support man on ground based apparatus which simulates weightlessness
[NASA-CASE-MFS-14671] c05 N71-12341
- Whole body measurement systems --- for weightlessness simulation
[NASA-CASE-MSC-13972-1] c52 N74-10975
- WELD STRENGTH**
- Grain refinement control in TIG arc welding
[NASA-CASE-MSC-19095-1] c37 N75-19683
- WELD TESTS**
- Nondestructive radiographic tests of resistance welds
[NASA-CASE-IMP-02588] c15 N71-18613
- Method and apparatus for testing integrated circuit microtab welds
[NASA-CASE-ARC-10176-1] c15 N72-21464
- WELDED JOINTS**
- Apparatus for welding blades to rotors
[NASA-CASE-LEW-10533-2] c37 N74-11300
- Ultrasonic scanning system for in-place inspection of brazed tube joints
[NASA-CASE-MFS-20767-1] c38 N74-15130
- Device for measuring the ferrite content in an austenitic stainless-steel weld
[NASA-CASE-MFS-22907-1] c26 N76-18257
- Capillary flow weld-bonding
[NASA-CASE-LAR-11726-1] c37 N76-27568
- WELDED STRUCTURES**
- Grain refinement control in TIG arc welding
[NASA-CASE-MSC-19095-1] c37 N75-19683
- Flanged major modular assembly jig
[NASA-CASE-MSC-19372-1] c39 N76-31562
- Weld-bonded titanium structures
[NASA-CASE-LAR-11549-1] c37 N77-11397
- Bimetallic junctions
[NASA-CASE-LEW-11573-1] c26 N77-28265
- WELDING**
- Segmented back-up bar for butt welding large tubular structures such as rocket booster bodies or tanks
[NASA-CASE-IMP-00640] c15 N70-39924
- Flexible backup bar for welding awkwardly shaped structures
[NASA-CASE-IMP-00722] c15 N70-40204
- Apparatus for welding sheet material --- butt joints
[NASA-CASE-IHS-01330] c37 N75-27376
- Weld-bonded titanium structures
[NASA-CASE-LAR-11549-1] c37 N77-11397
- WELDING MACHINES**
- Computer controlled apparatus for maintaining welding torch angle and velocity during seam tracking
[NASA-CASE-IMP-03287] c15 N71-15607
- Welding torch with automatic speed controller using speed sensing wheel and closed servo system
[NASA-CASE-IMP-01730] c15 N71-23050
- Development of electric welding torch with casing on one end to form inert gas shield
[NASA-CASE-IMP-02330] c15 N71-23798
- Development of apparatus for automatically changing carriage speed of welding machine to obtain constant speed of torch along work surface
[NASA-CASE-IMP-07069] c15 N71-23815
- Computerized system for translating a torch head
[NASA-CASE-MFS-23620-1] c37 N77-24497
- WET CELLS**
- Indicator device for monitoring charge of wet cell battery, using semiconductor light emitter and photodetector
[NASA-CASE-RFC-10194] c03 N71-20407
- WETTING**
- Anti-wettable materials brazing processes using titanium and zirconium for surface pretreatment
[NASA-CASE-IHS-03537] c15 N69-21471
- WHEATSTONE BRIDGES**
- Self-balancing strain gage transducer with bridge circuit
[NASA-CASE-MFS-12827] c14 N71-17656
- Development of method for improving signal to noise ratio and accuracy of Wheatstone bridge type radiation measuring instrument
[NASA-CASE-ILA-02810] c14 N71-25901
- Temperature control system comprised of wheatstone bridge with RC circuit
[NASA-CASE-NFO-11304] c14 N73-26430
- WHISKER COMPOSITES**
- Composites reinforced with short metal fibers or whiskers and having high tensile strength
[NASA-CASE-ILE-00228] c17 N70-38490
- WHISKERS (SINGLE CRYSTALS)**
- Catalyst for increased growth of boron carbide crystal whiskers
[NASA-CASE-IMP-03903] c15 N69-21922
- WICKS**
- Method of forming a wick for a heat pipe
[NASA-CASE-NFO-13391-1] c34 N76-27515
- WIDE ANGLE LENSES**
- Wide angle eyepiece with long eye-relief distance
[NASA-CASE-IHS-06056-1] c23 N71-24857
- WIDEBAND COMMUNICATION**
- Wideband heterodyne receiver for laser communication system
[NASA-CASE-GSC-12053-1] c32 N77-28346
- WINCHES**
- Design and characteristics of device for showing amount of cable payed out from winch and load imposed
[NASA-CASE-MSC-12052-1] c15 N71-24599
- WIND EFFECTS**
- Mercury filled pendulum damper for controlling bending vibration induced by wind effects
[NASA-CASE-LAR-10274-1] c14 N71-17626
- WIND MEASUREMENT**
- Passive optical wind and turbulence remote detection system
[NASA-CASE-IMP-14032] c20 N71-16340
- Maxometers for measuring peak wind speeds during severe environmental conditions
[NASA-CASE-MFS-20916] c14 N73-25460
- Wind sensor
[NASA-CASE-NFO-13462-1] c35 N76-24524
- Focused laser Doppler velocimeter
[NASA-CASE-MFS-23178-1] c35 N77-10493
- Wind measurement system
[NASA-CASE-MFS-23362-1] c47 N77-10753

WIND PROFILES

Free-fall body for obtaining wind velocity profiles by radar tracking
[NASA-CASE-XLA-02081] c20 N71-16281

WIND TUNNEL APPARATUS

Wind tunnel air flow modulating device and apparatus for selectively generating wave motion in wind tunnel airstream
[NASA-CASE-XIA-00112] c11 N70-33287

Electric arc device for minimizing electrode ablation and heating gases to supersonic or hypersonic wind tunnel temperatures
[NASA-CASE-XAC-00319] c25 N70-41628

Free flight suspension system for use with aircraft models in wind tunnel tests
[NASA-CASE-XIA-00939] c11 N71-15926

Burst diaphragm flow initiator for installation in short duration wind tunnels
[NASA-CASE-MFS-12915] c11 N71-17600

Electric arc heater with supersonic nozzle and fixed arc length for use in high temperature wind tunnels
[NASA-CASE-XAC-01677] c09 N71-20816

Design and characteristics of device for launching models in wind tunnels without disturbance of air flow
[NASA-CASE-XNP-03576] c11 N71-23030

Development of wind tunnel microphone structure to minimize effects of vibrations and eliminate unwanted signals in microphone output
[NASA-CASE-XNP-00250] c11 N71-28779

WIND TUNNEL DRIVES

Triggering system for electric arc driven impulse wind tunnel
[NASA-CASE-XNP-00411] c11 N70-36913

WIND TUNNEL MODELS

Wind tunnel method for simulating flow fields around blunt vehicles entering planetary atmospheres without involving high temperatures
[NASA-CASE-LAR-11138] c12 N71-20436

Multilegged support system for wind tunnel test models subjected to thermal dynamic loading
[NASA-CASE-XIA-01326] c11 N71-21481

Design and characteristics of device for launching models in wind tunnels without disturbance of air flow
[NASA-CASE-XNP-03576] c11 N71-23030

Damper system for alleviating air flow shock loads on wind tunnel models
[NASA-CASE-XIA-05480] c11 N71-33612

Wind tunnel model and method
[NASA-CASE-LAR-10812-1] c09 N74-17955

Method for determining thermo-physical properties of specimens --- photographic recording of changes in thin film phase-change temperature indicating material in wind tunnel
[NASA-CASE-LAR-11053-1] c25 N74-18551

WIND TUNNEL NOZZLES

Multi-purpose wind tunnel reaction control model block
[NASA-CASE-MSC-19706-1] c09 N77-19077

WIND TUNNEL TESTS

Multi-purpose wind tunnel reaction control model block
[NASA-CASE-MSC-19706-1] c09 N77-19077

Metallic hot wire anemometer --- for high speed wind tunnel tests
[NASA-CASE-ARC-10911-1] c35 N77-20400

WIND TUNNELS

Thin film gauge --- for measuring convective heat transfer rates along test surfaces in wind tunnels
[NASA-CASE-NPO-10617-1] c35 N74-22095

Wind tunnel flow generation section
[NASA-CASE-ARC-10710-1] c09 N75-12969

Apparatus for reducing aerodynamic noise in a wind tunnel
[NASA-CASE-MFS-23099-1] c09 N76-23273

WIND VELOCITY MEASUREMENT

Free-fall body for obtaining wind velocity profiles by radar tracking
[NASA-CASE-XIA-02081] c20 N71-16281

WINDING

Black body radiometer design with temperature sensing and cavity heat source cone winding
[NASA-CASE-XNP-05701] c14 N71-26475

Pulse coupling circuit with switch between generator and winding
[NASA-CASE-LFW-10433-1] c09 N72-22197

WINDOWS (APERTURES)

Waveguide, thin film window and microwave irises
[NASA-CASE-IAR-10513-1] c07 N72-25170

Observation window for internal gas confining chamber
[NASA-CASE-NFO-10890] c11 N73-12265

Polymer coatings for moisture protection of optical windows in infrared spectroscopy
[NASA-CASE-ARC-10749-1] c23 N73-32542

WINDSHIELDS

Transparent fire resistant polymeric structures
[NASA-CASE-ARC-10813-1] c27 N76-16230

WING FLAPS

Upper surface, external flow, jet-augmented flap configuration for high wing jet aircraft for noise reduction
[NASA-CASE-XIA-00087] c02 N70-33332

WING PROFILES

Supersonic aircraft configuration providing for variable aspect ratio and variable sweep wings
[NASA-CASE-XIA-00166] c02 N70-34178

WING TIP VORTICES

Wingtip vortex dissipator for aircraft
[NASA-CASE-IAR-11645-1] c02 N77-10001

WING TIPS

Smoke generator
[NASA-CASE-AEC-10905-1] c37 N77-13418

WINGS

Development of auxiliary lifting system to provide ferry capability for entry vehicles
[NASA-CASE-LAR-10574-1] c11 N73-13257

Surface finishing --- for aircraft wings
[NASA-CASE-MSC-12631-1] c24 N77-28225

Variable dihedral shuttle orbiter
[NASA-CASE-LAR-10706-2] c05 N77-31132

An improved free wing for an aircraft
[NASA-CASE-FRC-10092-1] c05 N77-31135

WIRE

Transpiration cooled turbine blade made from metallic or ceramic wires
[NASA-CASE-XIE-00020] c15 N70-33226

Soldering device particularly suited to making high quality wiring joints for aerospace engineering utilizing capillary attraction to regulate flow of solder
[NASA-CASE-XLA-08911] c15 N71-27214

Device for bending metal ribbon or wire
[NASA-CASE-XLA-05966] c15 N72-12408

Method of fabricating equal length insulated wire
[NASA-CASE-FBC-10038] c15 N72-20444

Shielded flat conductor cable of ribbonlike wires laminates in thin flexible insulation
[NASA-CASE-MFS-13687-2] c09 N72-22198

Twisted wire or tube superconductor for filament windings
[NASA-CASE-LFW-11015] c26 N73-32571

WIRE BRIDGE CIRCUITS

Black body cavity radiometer with thermal resistance wire bridge circuit
[NASA-CASE-XNP-08961] c14 N71-24809

WIRE CLOTH

Insulating system for receptacles of liquefied gases using wire cloth for forming frost layer
[NASA-CASE-XNP-00341] c15 N70-33323

Method for making screen with unlimited fineness of mesh and screen thickness
[NASA-CASE-XIE-00953] c15 N71-15966

WIRE WINDING

Adjustable spiral wire winding device
[NASA-CASE-XMS-02383] c15 N71-15918

Superconducting alternator design with cryogenic fluid for cooling windings below critical temperature
[NASA-CASE-XIE-02823] c09 N71-23443

Direct current motor including stationary field windings and stationary armature winding
[NASA-CASE-XGS-07805] c15 N72-33476

WIRELESS COMMUNICATIONS

Silent alarm system for multiple room facility or school
[NASA-CASE-NFO-11307-1] c10 N73-30205

WIRING

Acoustic vibration test apparatus for wiring harnesses
[NASA-CASE-MSC-15158-1] c14 N72-17325

WORDS (LANGUAGE)

Encoders designed to generate comma free biorthogonal Reed-Muller type code comprising conversion of 64 6-bit words into 64 32-bit

data for communication purposes
[NASA-CASE-NFO-10595] c10 N71-25917
Logic circuit for generating multibit binary
code word in parallel
[NASA-CASE-INF-04623] c10 N71-26103
Digital memory system with multiple switch cores
for driving each word location
[NASA-CASE-INF-01466] c10 N71-26434

WRENCHES
Ultrasonic wrench for applying vibratory energy
to mechanical fasteners
[NASA-CASE-NFS-20586] c15 N71-17686
System for enhancing tool-exchange capabilities
of a portable wrench
[NASA-CASE-NFS-22283-1] c37 N75-33395
Zero torque gear head wrench
[NASA-CASE-NFC-13059-1] c37 N76-20480

WRIST
Wrist joint assembly
[NASA-CASE-NFS-23311-1] c37 N76-28554

X

X RAY APPARATUS
Device and method for determining X ray
reflection efficiency, scattering properties,
and surface finish of optical surfaces
[NASA-CASE-NFS-20243] c23 N73-13662

X RAY DENSITY MEASUREMENT
Selective image area control of X-ray film
exposure density
[NASA-CASE-NFO-13808-1] c35 N77-24456

X RAY DIFFRACTION
An improved method and apparatus for use in
examining the lattice of a semiconductor wafer
by X-ray diffraction
[NASA-CASE-NFS-23315-1] c76 N76-32029

X RAY INSPECTION
Method of determining bond quality of power
transistors attached to substrates --- X ray
inspection of junction microstructure
[NASA-CASE-NFS-21931-1] c37 N75-26372
An improved method and apparatus for use in
examining the lattice of a semiconductor wafer
by X-ray diffraction
[NASA-CASE-NFS-23315-1] c76 N76-32029

X RAY IRRADIATION
Multisample test chamber for exposing materials
to X rays, temperature change, and gaseous
conditions and determination of material effects
[NASA-CASE-NFS-02930] c11 N71-23042

X RAY LASERS
Soft X-ray laser using crystal channels as
distributed feedback cavities --- zeolites
[NASA-CASE-NFO-13532-1] c36 N75-15973

X RAY TELESCOPES
X ray collimating structure for focusing
radiation directly onto detector
[NASA-CASE-NHQ-04106] c14 N70-40240
Three mirror glancing incidence system for X-ray
telescope
[NASA-CASE-NFS-21372-1] c74 N74-27866
Method and means for testing a
glancing-incidence mirror system --- for X-ray
telescopes
[NASA-CASE-NFS-22409-2] c74 N76-26988

X RAYS
Supporting structure for simultaneous exposure
of pellets to X rays
[NASA-CASE-INF-06031] c15 N71-15606
Low intensity X-ray and gamma-ray imaging device
[NASA-CASE-GSC-12263-1] c35 N77-29471

X-Y PLOTTERS
Describing device for surveying contour of
surface using X-Y plotter and traveling
transducer
[NASA-CASE-XLA-06646] c14 N71-17586
Magnetometer --- with an automatic scanning
transducer
[NASA-CASE-LAR-11617-2] c35 N77-17430

X-15 AIRCRAFT
Data processing and display system for terminal
guidance of X-15 aircraft
[NASA-CASE-IFR-00756] c22 N71-13421

XENON ISOTOPES
Apparatus for producing high purity I-123 from
Xe-123 by bombarding tellurium target with
cyclotron beam
[NASA-CASE-LEW-10516-2] c24 N72-28714

XENON LAMPS

Xenon flashlamp driver system for optical laser
pumping
[NASA-CASE-FRC-10283] c16 N72-25485

Y**YAG LASERS**

Dually mode locked Nd:YAG laser
[NASA-CASE-GSC-11746-1] c36 N75-19654
Length controlled stabilized mode-lock Nd:YAG
laser
[NASA-CASE-GSC-11571-1] c36 N77-25499

YARNS

Flexible pile thermal barrier seal
[NASA-CASE-MSC-19568-1] c37 N76-23585

YAW

Three-axis controller operated by hand-wrist
motion for yaw, pitch, and roll control
[NASA-CASE-XAC-01404] c05 N70-41581

YO-YO DEVICES

Stretch Yo-Yo mechanism for reducing initial
spin rate of space vehicle
[NASA-CASE-XGS-00619] c30 N70-40016

Z**ZEOLITES**

Development of filter system for control of
outgas contamination in vacuum conditions
using absorbent beds of molecular sieve
zeolite, silica gel, and charcoal
[NASA-CASE-NFS-14711] c15 N71-26185
Soft X-ray laser using crystal channels as
distributed feedback cavities --- zeolites
[NASA-CASE-NFO-13532-1] c36 N75-15973

ZINC

Zinc dust formulation for abrasion resistant
steel coatings
[NASA-CASE-GSC-10361-1] c18 N72-23581
Rechargeable battery which combats shape change
of the zinc anode
[NASA-CASE-NQN-10862-1] c44 N76-29699

ZINC COMPOUNDS

Water content in vapor deposition atmosphere for
forming n-type and p-type junctions of zinc
doped gallium arsenide
[NASA-CASE-INF-01961] c26 N71-29156
Vacuum preparation of zinc titanate pigment
resistant to loss of reflective properties
[NASA-CASE-NFS-13532] c18 N72-17532
Brazing alloy
[NASA-CASE-INF-03878] c26 N75-27127
Zinc-halide battery with molten electrolyte
[NASA-CASE-NFO-11961-1] c44 N76-18643
Method of preparing zinc orthotitanate pigment
[NASA-CASE-NFS-23345-1] c27 N77-30237

ZINC OXIDES

Binder stabilized zinc oxide pigmented coating
for spacecraft thermal control
[NASA-CASE-INF-07770-2] c18 N71-26772
Development of procedure for producing thin
transparent films of zinc oxide on transparent
refractory substrate
[NASA-CASE-FRC-10019] c15 N73-12487

ZIRCONIUM

Zirconium modified nickel-copper alloy
[NASA-CASE-LEW-12245-1] c26 N77-20201

ZIRCONIUM OXIDES

Bonding of sapphire to sapphire by eutectic
mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-1] c37 N75-15992

Page intentionally left blank

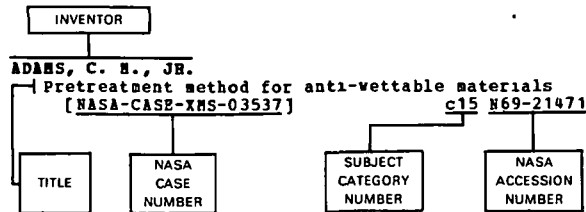
Inventor Index

NASA PATENT ABSTRACTS BIBLIOGRAPHY

JANUARY 1978

Section 2

Typical Inventor Index Listing



Listings in this index are arranged alphabetically by inventor. The title of the document provides the user with a brief description of the subject matter. The NASA Case Number is the prime access point to patent documents. The subject category number indicates the category in Section 1 (Abstracts) in which the citation is located. The NASA accession number denotes the number by which the citation is identified within the subject category. The titles are arranged under each inventor in ascending accession number order.

A

ABEL, I. B.
Optical instruments
[NASA-CASE-MSC-14096-1] c74 N74-15095

ABERNATHY, W. J.
Insert facing tool
[NASA-CASE-MFS-21485-1] c37 N74-25968

ABHYANKAR, K. D.
Interferometer-polarimeter
[NASA-CASE-NFO-11239] c14 N73-12446

ABSHIRE, J. E.
Polarization compensator for optical communications
[NASA-CASE-GSC-11782-1] c74 N76-30053

ACORD, J. D.
Photosensitive device to detect hearing deviatric Patent
[NASA-CASE-XNP-00438] c21 N70-35089
Space vehicle attitude control Patent
[NASA-CASE-XNP-00465] c21 N70-35395
Attitude control for spacecraft Patent
[NASA-CASE-XNP-02982] c31 N70-41855
Anti-lacklash circuit for hydraulic drive system Patent
[NASA-CASE-XNP-01020] c03 N71-12260
Solar vane actuator Patent
[NASA-CASE-XNF-05535] c14 N71-23040

ACUNA, M. E.
Two axis fluxgate magnetometer Patent
[NASA-CASE-GSC-10441-1] c14 N71-27325
Controllable high voltage source having fast settling time
[NASA-CASE-GSC-11844-1] c33 N75-19522

ADACHI, E. E.
Programmable physiological infusion
[NASA-CASE-AFC-10447-1] c52 N74-22771

ADAMS, C. H., JR.
Pretreatment method for anti-wettable materials
[NASA-CASE-XMS-03537] c15 N69-21471

ADAMS, G. D.
Vacuum deposition apparatus Patent
[NASA-CASE-XMF-01667] c15 N71-17647
Evaporant source for vapor deposition Patent
[NASA-CASE-XMF-06065] c15 N71-20395

ADAMSON, E. J.
Ultraviolet and thermally stable polymer compositions
[NASA-CASE-ARC-10592-1] c27 N74-21156
Electrical conductivity cell and method for fabricating the same
[NASA-CASE-ARC-10810-1] c33 N76-19339

Ultraviolet and thermally stable polymer compositions
[NASA-CASE-ARC-10592-2] c27 N76-32315

AIRTH, H. B., JR.
Regulated power supply Patent
[NASA-CASE-XMS-01991] c09 N71-21449

AISENBURG, S.
Doppler shift system
[NASA-CASE-ECN-10740-1] c72 N74-19310

AJIOKA, J. S.
High efficiency multifrequency feed
[NASA-CASE-GSC-11909] c32 N74-20863

AKAWIE, R. I.
Thiophenyl ether disiloxanes and trisiloxanes useful as lubricant fluids
[NASA-CASE-MFS-22411-1] c37 N74-21058

ALBRECHT, W. F.
Fifth wheel
[NASA-CASE-PRC-10081-1] c37 N77-14477

ALBREIGHT, C. F.
Water management system and an electrolytic cell therefor Patent
[NASA-CASE-MSC-10960-1] c03 N71-24718
Process for separation of dissolved hydrogen from water by use of palladium and process for coating palladium with palladium black
[NASA-CASE-MSC-13335-1] c06 N72-31140

ALBUS, J. S.
Light sensitive digital aspect sensor Patent
[NASA-CASE-IGS-00359] c14 N70-34158
System and method for tracking a signal source
[NASA-CASE-HCN-10880-1] c32 N75-30385

ALDRICH, B. E.
Underwater space suit pressure control regulator
[NASA-CASE-MFS-20332] c05 N72-20097
Underwater space suit pressure control regulator
[NASA-CASE-MFS-20332-2] c05 N73-25125
General purpose rocket furnace
[NASA-CASE-MFS-23460-1] c09 N77-12070

ALESNA, R. E.
Flexible joint for pressurizable garment
[NASA-CASE-MSC-11072] c54 N74-32546

ALEXANDER, E., JR.
Disconnect unit
[NASA-CASE-NFO-11330] c33 N73-26958

ALFORD, W. J., JR.
Variable sweep wing configuration Patent
[NASA-CASE-XLA-00230] c02 N70-33255

ALGER, D. L.
Deuterium pass through target
[NASA-CASE-LEW-11866-1] c72 N76-15860
Method of forming metal hydride films
[NASA-CASE-LEW-12083-1] c26 N76-18262
Closed loop spray cooling apparatus
[NASA-CASE-LEW-11981-1] c37 N76-20486
Closed loop spray cooling apparatus
[NASA-CASE-LEW-11981-2] c34 N77-32434

ALLEN, G. V.
Electric welding torch Patent
[NASA-CASE-XNF-02330] c15 N71-23798

ALLEN, B., JR.
Apparatus for igniting solid propellants Patent
[NASA-CASE-XLF-00207] c28 N70-33375
Method of igniting solid propellants Patent
[NASA-CASE-XLB-01988] c27 N71-15634

ALLEN, J. G., JR.
Lunar landing flight research vehicle Patent
[NASA-CASE-XFB-00929] c31 N70-34966

ALLEN, J. H., SR.
Apparatus for machining geometric cones Patent
[NASA-CASE-XMS-04292] c15 N71-22722

ALLEN, L. D.
Method of improving heat transfer characteristics in a nucleate boiling process Patent

INVENTOR

[NASA-CASE-XMS-04268]	c33 N71-16277	Ranging system Patent	
ALLEN, L. E.		[NASA-CASE-NFO-10066]	c09 N71-18598
Method and apparatus for aligning a laser beam projector Patent		Data compression processor Patent	
[NASA-CASE-NFO-11087]	c23 N71-29125	[NASA-CASE-NFO-10068]	c08 N71-19288
ALLEN, R. W.		Data compressor Patent	
Ceramic insulation for radiant heating environments and method of preparing the same Patent		[NASA-CASE-XNF-04067]	c08 N71-22707
[NASA-CASE-MFS-14253]	c33 N71-24858	Error correcting method and apparatus Patent	
ALLEN, W. K.		[NASA-CASE-XNF-02748]	c08 N71-22749
Time division multiplex system		Comparator for the comparison of two binary numbers Patent	
[NASA-CASE-XGS-05918]	c07 N69-39974	[NASA-CASE-XNF-04819]	c08 N71-23295
Serrodyne frequency converter re-entrant amplifier system Patent		Digital synchronizer Patent	
[NASA-CASE-XGS-01022]	c07 N71-16088	[NASA-CASE-NFO-10851]	c07 N71-24613
Traffic control system and method Patent		Decoder system Patent	
[NASA-CASE-GSC-10087-1]	c02 N71-19287	[NASA-CASE-NFO-10118]	c07 N71-24741
Satellite interlace synchronization system		Parallel generation of the check bits of a FN sequence Patent	
[NASA-CASE-GSC-10390-1]	c07 N72-11149	[NASA-CASE-XNF-04623]	c10 N71-26103
Doppler compensation by shifting transmitted object frequency within limits		Rapid sync acquisition system Patent	
[NASA-CASE-GSC-10087-4]	c07 N73-20174	[NASA-CASE-NFO-10214]	c10 N71-26577
ALLEN, W. W.		Digital filter for reducing sampling jitter in digital control systems Patent	
Analog-to-digital converter analyzing system		[NASA-CASE-NFO-11088]	c08 N71-29034
[NASA-CASE-NFO-10560]	c08 N72-22166	Encoder/decoder system for a rapidly synchronizable binary code Patent	
ALLEY, V. L., JR.		[NASA-CASE-NFO-10342]	c10 N71-33407
Nozzle extraction process and handmeter for measuring handle		Modular encoder	
[NASA-CASE-LAB-12147-1]	c27 N77-10198	[NASA-CASE-NFO-10629]	c08 N72-18184
Amplifying ribbon extensometer		Transition tracking bit synchronization system	
[NASA-CASE-LAB-11825-1]	c35 N77-22449	[NASA-CASE-NFO-10844]	c07 N72-20140
ALLGEIER, R. E., JR.		Digital quasi-exponential function generator	
Metal valve pintle with encapsulated elastomeric body Patent		[NASA-CASE-NFO-11130]	c08 N72-20176
[NASA-CASE-MSC-12116-1]	c15 N71-17648	MOD 2 sequential function generator for multibit binary sequence	
ALPER, M. E.		[NASA-CASE-NFO-10636]	c08 N72-25210
Automated multi-level vehicle parking system		Digital slope threshold data compressor	
[NASA-CASE-NFO-13058-1]	c37 N77-22480	[NASA-CASE-NFO-11630]	c08 N72-33172
ALTSHULER, T. I.		Asynchronous, multiplexing, single line transmission and recovery data system	
Orifice gross leak tester Patent		[NASA-CASE-NFO-13321-1]	c32 N75-26195
[NASA-CASE-ERC-10150]	c14 N71-28992	Multi-computer multiple data path hardware exchange system	
AMBROSIO, A.		[NASA-CASE-NFO-13422-1]	c60 N76-14818
Gas operated actuator		Computer interface system	
[NASA-CASE-NFO-11340]	c15 N72-33477	[NASA-CASE-NFO-13428-1]	c60 N77-12721
ANDER, G. A.		ANDERSON, W. J.	
Telespectrograph Patent		Method of improving the reliability of a rolling element system Patent	
[NASA-CASE-XLA-03273]	c14 N71-18699	[NASA-CASE-XLE-02999]	c15 N71-16052
ANON, E.		High speed rolling element bearing	
Ritchey-Chretien Telescope		[NASA-CASE-LEW-10856-1]	c15 N72-22490
[NASA-CASE-GSC-11487-1]	c14 N73-30393	High speed hybrid bearing comprising a fluid bearing and a rolling bearing connected in series	
ANACKER, K.		[NASA-CASE-LEW-11152-1]	c15 N73-32359
Forming tool for ribbon or wire		Thrust bearing	
[NASA-CASE-XLA-C5566]	c15 N72-12408	[NASA-CASE-LEW-11949-1]	c37 N76-29588
ANAGNOSTOU, E.		ANDERSON, W. W.	
Encapsulated solar cell modules		Annular momentum control device used for stabilization of space vehicles and the like	
[NASA-CASE-LEW-12185-1]	c44 N77-15490	[NASA-CASE-LAB-11051-1]	c15 N76-14158
ANDERSON, D. I.		Magnetic suspension and pointing system	
Static inverters which use a plurality of waves Patent		[NASA-CASE-LAB-11889-1]	c19 N76-18227
[NASA-CASE-XNF-00663]	c08 N71-18752	ANDERSON, W. W., JR.	
ANDERSON, F. A.		Compensating radiometer	
Solid propellant rocket motor		[NASA-CASE-XLA-04556]	c14 N69-27484
[NASA-CASE-XNF-03282]	c28 N72-20758	Semi-linear ball bearing Patent	
ANDERSON, G. D.		[NASA-CASE-XLA-02809]	c15 N71-22982
Phase detector assembly Patent		ANDREWS, E. E., JR.	
[NASA-CASE-XNF-00701]	c09 N70-40272	Method of obtaining permanent record of surface flow phenomena Patent	
ANDERSON, G. E.		[NASA-CASE-XLA-01353]	c14 N70-41366
Flexible pile thermal barrier seal		ANDREWS, R. E.	
[NASA-CASE-MSC-19568-1]	c37 N76-23585	Inverter ratio failure detector	
ANDERSON, J. E.		[NASA-CASE-NFO-13160-1]	c35 N74-18090
Method for removing oxygen impurities from cesium Patent		ANDREWS, T. W.	
[NASA-CASE-XNF-04262-2]	c17 N71-26773	Adjustable support	
ANDERSON, K. F.		[NASA-CASE-NFO-10721]	c15 N72-27484
Pulsed excitation voltage circuit for transducers		ANGELE, W.	
[NASA-CASE-FBC-10036]	c09 N72-22200	Electrical connector for flat cables Patent	
ANDERSON, R. A.		[NASA-CASE-XNF-00324]	c09 N70-34596
Sandwich panel construction Patent		Instrument support with precise lateral adjustment Patent	
[NASA-CASE-XLA-00349]	c33 N70-37979	[NASA-CASE-XNF-00480]	c14 N70-39898
ANDERSON, R. E.		Support apparatus for dynamic testing Patent	
Automatic transponder		[NASA-CASE-XNF-01772]	c11 N70-41677
[NASA-CASE-GSC-12075-1]	c32 N77-31350	Method of making a molded connector Patent	
ANDERSON, R. Y.		[NASA-CASE-XNF-03498]	c15 N71-15986
Piezoelectric pump Patent			
[NASA-CASE-XNF-05429]	c26 N71-21824		
ANDERSON, T. O.			
Binary number sorter Patent			
[NASA-CASE-NFO-10112]	c08 N71-12502		

Method of making shielded flat cable Patent
[NASA-CASE-MFS-13687] c09 N71-28691

Shielded flat cable
[NASA-CASE-MFS-13687-2] c09 N72-22198

Electrical connector
[NASA-CASE-MFS-2C757] c09 N72-28225

Cryogenic gyroscope housing
[NASA-CASE-MFS-21136-1] c35 N74-18323

APPEL, M. A.
Propellant tank pressurization system Patent
[NASA-CASE-IMP-0656] c27 N71-28929

APPLEBERY, W. I.
Device for measuring tensile forces
[NASA-CASE-MFS-21728-1] c35 N74-27865

Device for use in loading tension members
[NASA-CASE-MFS-21488-1] c14 N75-24794

Sequencing device utilizing planetary gear set
[NASA-CASE-MSC-19514-1] c37 N77-19459

Mechanical sequencer
[NASA-CASE-MSC-19536-1] c37 N77-22482

Non-floating universal joint
[NASA-CASE-MSC-19546-1] c37 N77-25536

Load regulating latch
[NASA-CASE-MSC-19535-1] c37 N77-32499

APPLER, R. L.
Method for generating ultra-precise angles Patent
[NASA-CASE-IGS-04173] c19 N71-26674

APPLETON, B. W.
Omnidirectional slot antenna for mounting on
cylindrical space vehicle
[NASA-CASE-LAR-10163-1] c09 N72-25247

ARCAND, G. M.
Method for determining the state of charge of
batteries by the use of tracers Patent
[NASA-CASE-IMP-01464] c03 N71-10728

ARCELLA, F. G.
Method of forming a wick for a heat pipe
[NASA-CASE-NFO-13391-1] c34 N76-27515

Bimetallic junctions
[NASA-CASE-LEW-11573-1] c26 N77-28265

ARENS, W. E.
Charge-coupled device data processor for an
airborne imaging radar system
[NASA-CASE-NFO-13587-1] c32 N77-32342

ARGOOD, M. J.
Lightweight reflector assembly
[NASA-CASE-NFO-13707-1] c74 N77-28933

ARIAS, A.
Apparatus for positioning and loading a test
specimen Patent
[NASA-CASE-XLE-01300] c15 N70-41993

Thermal shock apparatus Patent
[NASA-CASE-XLE-02024] c14 N71-22964

Production of metal powders
[NASA-CASE-XLE-06461] c17 N72-22530

Method for producing dispersion strengthened
alloys by converting metal to a halide,
commuting, reducing the metal halide to the
metal and sintering
[NASA-CASE-LEW-10450-1] c15 N72-25448

Apparatus for producing metal powders
[NASA-CASE-XLE-06461-2] c17 N72-28535

ARNSTROM, B. I.
Coupling for linear shaped charge Patent
[NASA-CASE-XIA-00189] c33 N70-36846

ARNOLD, G. D.
System for improving signal-to-noise ratio of a
communication signal Patent Application
[NASA-CASE-MSC-12259-1] c07 N70-12616

System for improving signal-to-noise ratio of a
communication signal
[NASA-CASE-MSC-12259-2] c07 N72-33146

ARNOLD, W. E., JR.
Electrical resistance spot welding and brazing
techniques for metal bonding
[NASA-CASE-LAR-11072-1] c15 N73-20535

ARRANCE, F. C.
Method of making membranes
[NASA-CASE-IMP-04264] c03 N69-21337

ASHBROOK, B. I.
High temperature cobalt-base alloy Patent
[NASA-CASE-XLE-00726] c17 N71-15644

High temperature cobalt-base alloy Patent
[NASA-CASE-XLE-02991] c17 N71-16025

High temperature ferromagnetic cobalt-base alloy
Patent
[NASA-CASE-XLE-03629] c17 N71-23248

Method of forming superalloys
[NASA-CASE-LEW-10805-1] c15 N73-13465

Method of heat treating a formed powder product
material
[NASA-CASE-LEW-10805-3] c26 N74-10521

Method of forming articles of manufacture from
superalloy powders
[NASA-CASE-LEW-10805-2] c37 N74-13179

ASHWORTH, B. E.
Apparatus for applying simulator g-forces to an
arm of an aircraft simulator pilot
[NASA-CASE-LAR-10550-1] c09 N74-30597

A seat cushion to provide realistic acceleration
cues for aircraft simulator pilots
[NASA-CASE-LAR-12149-1] c54 N77-31787

ASKINS, B. S.
Method of post-process intensification of images
on photographic films and plates
[NASA-CASE-MFS-23461-1] c35 N76-26449

ASTHEIMER, B. W.
Multi-lobar scan horizon sensor Patent
[NASA-CASE-IGS-00809] c21 N70-35427

ATKISSON, R. A.
Apparatus having coaxial capacitor structure for
measuring fluid density Patent
[NASA-CASE-XLE-00143] c14 N70-36618

AUBLE, C. M.
Instrument for the quantitative measurement of
radiation at multiple wave lengths Patent
[NASA-CASE-XLE-00011] c14 N76-41946

AUER, S. O.
Cosmic dust or other similar outer space
particles impact location detector
[NASA-CASE-GSC-11291-1] c25 N72-33696

Macrometeoroid analyzer
[NASA-CASE-ARC-10443-1] c14 N73-20477

Impact position detector for outer space particles
[NASA-CASE-GSC-11829-1] c35 N75-27331

Macrometeoroid velocity and trajectory analyzer
[NASA-CASE-GSC-11892-1] c35 N76-15433

Moving particle composition analyzer
[NASA-CASE-GSC-11889-1] c35 N76-16393

Remote sensing of vegetation and soil using
microwave ellipsometry
[NASA-CASE-GSC-11976-1] c43 N76-23671

AUER, B. H.
Refractory porcelain enamel passive control
coating for high temperature alloys
[NASA-CASE-MFS-22324-1] c27 N75-27160

AUSTIN, W. E.
Compton scatter attenuation gamma ray spectrometer
[NASA-CASE-MFS-21441-1] c14 N73-30392

AVIXENIS, A. A.
Self-testing and repairing computer Patent
[NASA-CASE-NFO-10567] c08 N71-24633

AYVAZIAN, R. A.
Laminar flow enhancement Patent
[NASA-CASE-NFO-10122] c12 N71-17631

Propellant mass distribution metering apparatus
Patent
[NASA-CASE-NFO-10185] c10 N71-26339

B

BABA, P. D.
Method for making conductors for ferrite memory
arrays
[NASA-CASE-LAR-10994-1] c24 N75-13032

BABB, B. D.
Method and apparatus for cryogenic wire
stripping Patent
[NASA-CASE-MFS-10340] c15 N71-17628

Self-balancing strain gage transducer Patent
[NASA-CASE-MFS-12827] c14 N71-17656

BABECKI, A. J.
Peen plating
[NASA-CASE-GSC-11163-1] c15 N73-32360

BACCHI, R.
Valve actuator Patent
[NASA-CASE-IHQ-01208] c15 N70-35409

BACHLE, W. H.
Mechanically extendible telescoping boom
[NASA-CASE-NFO-11118] c03 N72-25021

BADIN, F. E.
Space simulation and radiative property testing
system and method Patent
[NASA-CASE-MFS-20096] c14 N71-30026

BAHR, E. F.
Channel-type shell construction for rocket
engines and the like Patent
[NASA-CASE-XLE-00144] c28 N70-34860

Rocket thrust chamber Patent
[NASA-CASE-XLE-00145] c28 N70-36806

Method of making a regeneratively cooled
combustion chamber Patent
[NASA-CASE-XLP-00150] c28 N70-41818

Method of making a rocket motor casing Patent
[NASA-CASE-XLE-00409] c28 N71-15658

Rocket motor casing Patent
[NASA-CASE-XLE-05689] c28 N71-15659

Ophthalmic liquifaction pump
[NASA-CASE-LEW-12051-1] c52 N75-33640

Improved tissue macerating instrument
[NASA-CASE-LEW-12668-1] c52 N76-23837

Flow compensating pressure regulator
[NASA-CASE-LEW-12718-1] c35 N77-20408

Corneal seal device
[NASA-CASE-LEW-12258-1] c52 N77-28716

Intra-ocular pressure normalization apparatus
[NASA-CASE-LEW-12955-1] c52 N77-30736

BAER, D. A.
Synchronous orbit battery cyclor
[NASA-CASE-GSC-11211-1] c03 N72-25020

BAGANOFF, D.
Means for controlling rupture of shock tube
diaphragm Patent
[NASA-CASE-IAC-00731] c11 N71-15960

BAGBY, J. P.
Thermally operated valve Patent
[NASA-CASE-XLE-00815] c15 N70-35407

BAHMAN, B.
Self-erecting reflector Patent
[NASA-CASE-XGS-09190] c31 N71-16102

BAHM, E. J.
A dc servosystem including an ac motor Patent
[NASA-CASE-NFO-10700] c07 N71-33613

BAILEY, C. L., JR.
Solid state controller three axes controller
[NASA-CASE-MSC-12394-1] c08 N74-10942

BAILEY, F. J., JR.
Airplane take-off performance indicator Patent
[NASA-CASE-XLA-00100] c14 N70-36807

BAILEY, G. A.
Magnetic matrix memory system Patent
[NASA-CASE-MXP-05835] c08 N71-12504

BAILEY, J. W.
Bi-polar phase detector and corrector for split
phase PCM data signals Patent
[NASA-CASE-XGS-01590] c07 N71-12392

Radio frequency coaxial high pass filter Patent
[NASA-CASE-XGS-01418] c09 N71-23573

BAILEY, M. C.
Stacked array of omnidirectional antennas
[NASA-CASE-LAR-10545-1] c09 N72-21244

BAILEY, R. L.
Apparatus and method for protecting a
photographic device Patent
[NASA-CASE-NFO-10174] c14 N71-18465

Solid propellant rocket motor nozzle
[NASA-CASE-NFO-11458] c28 N72-23810

Electromagnetic wave energy converter
[NASA-CASE-GSC-11394-1] c09 N73-32109

BAKER, B. E.
Radiation detector readout system Patent
[NASA-CASE-IHS-03478] c14 N71-21040

BAKER, C. D.
Coating process
[NASA-CASE-INP-06508] c18 N69-39895

Electrical spot terminal assembly Patent
[NASA-CASE-NFO-10034] c15 N71-17685

Electrical connector
[NASA-CASE-NFO-10694] c09 N72-20200

Pressure transducer
[NASA-CASE-NFO-10832] c14 N72-21405

BAKER, E. E.
Centrifuge mounted motion simulator Patent
[NASA-CASE-IAC-00399] c11 N70-34815

BAKER, J. T.
A logic-controlled occlusive cuff system
[NASA-CASE-MSC-14836-1] c52 N76-27839

BAKER, M. E.
Omnidirectional joint Patent
[NASA-CASE-IHS-09635] c05 N71-24623

BAKER, R. L.
Bidirectional step torque filter with zero
backlash characteristic Patent
[NASA-CASE-XGS-04227] c15 N71-21744

BAKER, V. D.
Vapor pressure measuring system and method Patent
[NASA-CASE-IHS-01618] c14 N71-20741

BAKSTON, B.
Apparatus for the determination of the existence
or non-existence of a bonding between two
members Patent
[NASA-CASE-MIS-13686] c15 N71-18132

BALDWIN, L. V.
Particle beam measurement apparatus using beam
kinetic energy to change the heat sensitive
resistance of the detection probe Patent
[NASA-CASE-XLE-00243] c14 N70-38602

Apparatus for increasing ion engine beam density
Patent
[NASA-CASE-XLE-00519] c28 N70-41576

BALES, T. T.
Controlled glass bead peening Patent
[NASA-CASE-XIA-07390] c15 N71-18616

Electrical resistance spot welding and brazing
techniques for metal bonding
[NASA-CASE-IAB-11072-1] c15 N73-20535

BALLARD, R. E.
Two-axis controller Patent
[NASA-CASE-XFB-04104] c03 N70-42073

BALLENTINE, F. E., JR.
Foam generator Patent
[NASA-CASE-XLA-00838] c03 N70-36778

BALLOU, E. V.
Process for the preparation of calcium superoxide
[NASA-CASE-ABC-11053-1] c25 N77-29252

BAMFORD, B. E.
Elastic universal joint Patent
[NASA-CASE-INP-00416] c15 N70-36947

Sealed separable connection Patent
[NASA-CASE-NFO-10064] c15 N71-17693

BANDINI, U.
Out of tolerance warning alarm system for
plurality of monitored circuits Patent
[NASA-CASE-XMS-10984-1] c10 N71-19417

BANKS, B. A.
Ion beam deflector Patent
[NASA-CASE-LEW-10689-1] c28 N71-26173

Ion thruster accelerator system Patent
[NASA-CASE-LEW-10106-1] c28 N71-26642

Process for glass coating an ion accelerator
grid Patent
[NASA-CASE-LEW-10278-1] c15 N71-28582

Ion thruster magnetic field control
[NASA-CASE-LEW-10835-1] c28 N72-22771

Electromagnetic flow rate meter
[NASA-CASE-LEW-10981-1] c35 N74-21018

Sputtering holes with ion beamlets
[NASA-CASE-LEW-11646-1] c20 N74-31269

Method of making dish ion thruster grids
[NASA-CASE-LEW-11694-1] c20 N75-18310

Apparatus for forming dish ion thruster grids
[NASA-CASE-LEW-11694-2] c37 N76-14461

Method of constructing dish ion thruster grids
to provide hole array spacing compensation
[NASA-CASE-LEW-11876-1] c20 N76-21276

Anode for ion thruster
[NASA-CASE-LEW-12048-1] c20 N77-20162

BAKSTON, B. F.
Device for measuring the ferrite content in an
austenitic stainless-steel weld
[NASA-CASE-MPS-22907-1] c26 N76-18257

BANTA, R. D.
Positive contact resistance soldering unit
[NASA-CASE-RSC-10242] c15 N72-23497

BARBER, J. B.
Laser grating interferometer Patent
[NASA-CASE-XIA-04295] c16 N71-24170

BARBERA, A. J.
Use of unilluminated solar cells as shunt diodes
for a solar array
[NASA-CASE-GSC-10344-1] c03 N72-27053

BARGER, R. L.
Continuously operating induction plasma
accelerator Patent
[NASA-CASE-XLA-01354] c25 N70-36946

BARISH, B.
Pulsed energy power system Patent
[NASA-CASE-MSC-13112] c03 N71-11057

BARKEB, P.
Vibrophonocardiograph Patent
[NASA-CASE-IFB-07172] c05 N71-27234

BARRETT, J. B., JR.
Life raft stabilizer
[NASA-CASE-MSC-12393-1] c02 N73-26006

BARRETT, M. A.
Furlable antenna

INVENTOR INDEX

BECKMAN, P.

[NASA-CASE-NFO-13553-1] c33 N76-32457

BARNISKIS, W. A.
Bus voltage compensation circuit for controlling direct current motor
[NASA-CASE-IMS-04215-1] c09 N69-39987

BARONA, C. E.
Solar cell surface treatment
[NASA-CASE-LEW-11330-1] c44 N76-14612
Solar cell surface treatment
[NASA-CASE-LEW-11330-2] c44 N76-33624

BARRETT, C. A.
Reduced chromium stainless steel alloys
[NASA-CASE-LEW-12543-1] c26 N77-21217

BARRETT, T. W.
Personal propulsion unit Patent
[NASA-CASE-MFS-20130] c28 N71-27585

BARRINGTON, A. E.
Sorption vacuum trap Patent
[NASA-CASE-XER-05519] c14 N71-18483

BARRINGTON, A. E.
Leak detector wherein a probe is monitored with ultraviolet radiation Patent
[NASA-CASE-ERC-10034] c15 N71-24896
Field ionization electrodes Patent
[NASA-CASE-ERC-10013] c09 N71-26678
Ion microprobe mass spectrometer for analyzing fluid materials Patent
[NASA-CASE-ERC-10014] c14 N71-28863
Device for measuring light scattering wherein the measuring beam is successively reflected between a pair of parallel reflectors Patent
[NASA-CASE-XER-11203] c14 N71-28994

BARTERA, R. E.
Indicator providing continuous indication of the presence of a specific pollutant in air
[NASA-CASE-NFO-13474-1] c45 N76-21742
Arc control in compact arc lamps
[NASA-CASE-NFO-11870-1] c33 N77-22386

BARTLOME, D. E.
Space suit pressure stabilizer Patent
[NASA-CASE-XIA-05332] c05 N71-11194
Equipotential space suit Patent
[NASA-CASE-LAR-10007-1] c05 N71-11195
Therapeutic hand exerciser
[NASA-CASE-LAR-11667-1] c52 N76-19785
Collapsible corrugated horn antenna
[NASA-CASE-LAR-11745-1] c32 N77-24339

BARZA, M. J.
Application of luciferase assay for ATP to antimicrobial drug susceptibility
[NASA-CASE-GSC-12039-1] c51 N77-22794
Determination of antimicrobial susceptibilities of infected urines without isolation
[NASA-CASE-GSC-12046-1] c52 N77-26797

BASIULIS, A.
Method and apparatus for distillation of liquids Patent
[NASA-CASE-XNP-08124] c15 N71-27184
Radial heat flux transducer
[NASA-CASE-NFO-10828] c33 N72-17948
Method for distillation of liquids
[NASA-CASE-XNP-08124-2] c06 N73-13129

BASS, A. M.
Ultraviolet resonance lamp Patent
[NASA-CASE-ARC-10030] c09 N71-12521
Ultraviolet atomic emission detector
[NASA-CASE-HCN-10756-1] c14 N72-25428

BASTIEN, G. J.
Fluid flow restrictor Patent
[NASA-CASE-NFO-10117] c15 N71-15608

BATE, E. E., JR.
Apparatus for establishing flow of a fluid mass having a known velocity
[NASA-CASE-MFS-21424-1] c34 N74-27730

BATES, R. E.
Segmenting lead telluride-silicon germanium thermocouples Patent
[NASA-CASE-XGS-05718] c26 N71-16037

BATHKER, D. A.
Dual frequency microwave reflex feed
[NASA-CASE-NFO-13091-1] c09 N73-12214

BATSCH, P. F.
Attitude control for spacecraft Patent
[NASA-CASE-XNP-00294] c21 N70-36938
Slit regulated gas journal bearing Patent
[NASA-CASE-XNP-00476] c15 N70-38620

BATTE, W. G.
Exclusive-Or digital logic module Patent
[NASA-CASE-XIA-07732] c08 N71-18751

BATTERSON, S. A.
Runway light Patent
[NASA-CASE-XIA-00119] c11 N70-33329

BATTS, C. M.
Contour surveying system Patent
[NASA-CASE-XIA-08646] c14 N71-17586

BAUCON, R. M.
Extensometer frame
[NASA-CASE-XIA-10322] c15 N72-17452

BAUER, H. E.
Air conditioning system and component therefore distributing air flow from opposite directions
[NASA-CASE-GSC-11445-1] c31 N74-27902

BAUERHNSCHUB, J. P., JR.
Folding boom assembly Patent
[NASA-CASE-IGS-00938] c32 N70-41367
Nonmagnetic, explosive actuated indexing device Patent
[NASA-CASE-XGS-02422] c15 N71-21529

BAUGHMAN, J. E.
Observation window for a gas confining chamber
[NASA-CASE-NFO-10890] c11 N73-12265
Droplet monitoring probe
[NASA-CASE-NFO-10985] c14 N73-20478

BAUMAN, A. J.
Solder flux which leaves corrosion-resistant coating Patent
[NASA-CASE-XNP-03459-2] c18 N71-15688
Soldering with solder flux which leaves corrosion resistant coating Patent
[NASA-CASE-XNP-03459] c15 N71-21078
Fluid impervious barrier including liquid metal alloy and method of making same Patent
[NASA-CASE-XNP-08881] c17 N71-28747

BAUMER, W. E.
Counter Patent
[NASA-CASE-XNP-06234] c10 N71-27137

BAXTER, R. D.
Heat flux measuring system Patent
[NASA-CASE-XFB-03802] c33 N71-23085

BEALE, R. A.
Hall effect magnetometer
[NASA-CASE-LEW-11632-2] c35 N75-13213

BEAN, B. H.
Thermoelectric radiometer utilizing polymer film
[NASA-CASE-ARC-10138-1] c14 N72-24477

BEAN, R. A.
Optical projector system Patent
[NASA-CASE-XNP-03853] c23 N71-21882

BEAN, R. H.
Solid medium thermal engine
[NASA-CASE-ARC-10461-1] c44 N74-33379

BEASLEY, R. M.
Two-component ceramic coating for silica insulation
[NASA-CASE-MSC-14270-1] c27 N76-22377
Three-component ceramic coating for silica insulation
[NASA-CASE-MSC-14270-2] c27 N76-23426

BEASLEY, W. D.
Continuously operating induction plasma accelerator Patent
[NASA-CASE-XIA-01354] c25 N70-36946

BEATTY, E. W.
Rotary vane attenuator wherein rotor has orthogonally disposed resistive and dielectric cards
[NASA-CASE-NFO-11418-1] c14 N73-13420

BEAUREGARD, W. W.
Water separating system Patent
[NASA-CASE-IMS-13052] c14 N71-20427

BECK, A. F.
Small plasma probe Patent
[NASA-CASE-XIE-02578] c25 N71-20747

BECK, T. R.
Method of inhibiting stress corrosion cracks in titanium alloys Patent
[NASA-CASE-NFO-10271] c17 N71-16393

BECKER, R. A.
Photoelectric energy spectrometer Patent
[NASA-CASE-XNP-04161] c14 N71-15599

BECKEBLE, L. D.
Heat shield oven
[NASA-CASE-IMS-04318] c15 N69-27871

BECKMAN, P.
Probes having ring and primary sensor at same potential to prevent collection of stray wall currents in ionized gases
[NASA-CASE-XIF-00690] c25 N69-39884

BECKWITH, R. H.
Mechanical coordinate converter Patent
[NASA-CASE-XNP-00614] c14 N70-36907

BEREN, J. H.
Optical tracking mount Patent
[NASA-CASE-HFS-14017] c14 N71-26627

BERN, J. P.
Method and apparatus for measuring electromagnetic radiation
[NASA-CASE-LEW-11159-1] c14 N73-28488

BERN, J. W.
Solid propellant rocket motor
[NASA-CASE-HFO-11559] c28 N73-24784

BELANGER, R. J.
Fluid lubricant system Patent
[NASA-CASE-XNP-03972] c15 N71-23048

BELASCO, W.
Medical subject monitoring systems
[NASA-CASE-MSC-14180-1] c52 N76-14757

BELEW, R. W., JR.
Altitude simulation chamber for rocket engine testing
[NASA-CASE-HFS-20620] c11 N72-27262

BELEW, R. B.
Thermal compensating structural member
[NASA-CASE-HFS-20433] c15 N72-28496
Docking structure for spacecraft
[NASA-CASE-HFS-20863] c31 N73-26876
Emergency descent device
[NASA-CASE-HFS-23674-1] c54 N77-21844

BELL, A. T.
Process for preparing higher oxides of the alkali and alkaline earth metals
[NASA-CASE-ABC-10992-1] c25 N77-17178

BELL, C. H.
Fiber optic multiplex optical transmission system
[NASA-CASE-RSC-11047-1] c74 N77-15826

BELL, D., III
Heated element fluid flow sensor Patent
[NASA-CASE-MSC-12084-1] c12 N71-17569

BELL, V. L.
Aromatic polyimide preparation
[NASA-CASE-LAR-11372-1] c27 N74-19772
A method of preparing aromatic polyimides having uniquely low softening temperatures
[NASA-CASE-LAR-11828-1] c23 N75-29181
Polyimide adhesives
[NASA-CASE-LAR-11397-1] c27 N75-29263
Polyimide adhesives
[NASA-CASE-LAR-12181-1] c27 N77-15192

BELL, V. L., JR.
Process for interfacial polymerization of pyromellitic dianhydride and 1,2,4,5-tetraamino-benzene Patent
[NASA-CASE-XLA-03104] c06 N71-11235
Imidazopyrrolone/imide copolymers Patent
[NASA-CASE-XLA-08802] c06 N71-11238
Dosimeter for high levels of absorbed radiation
[NASA-CASE-XLA-03645] c14 N71-20430

BENNETT, L. J.
Linear explosive comparison
[NASA-CASE-LAR-10800-1] c33 N72-27959
Totally confined explosive welding
[NASA-CASE-LAR-10941-2] c15 N73-32371
Totally confined explosive welding
[NASA-CASE-LAR-10941-1] c37 N74-21057
Method of making an explosively welded scarf joint
[NASA-CASE-LAR-11211-1] c37 N75-12326

BENNETT, B. D.
Transient augmentation circuit for pulse amplifiers Patent
[NASA-CASE-XNP-01068] c10 N71-28739

BENGISON, B. D.
Fast opening diaphragm Patent
[NASA-CASE-XLA-03660] c15 N71-21060

BENNY, J. D.
Method and apparatus for precision sizing and joining of large diameter tubes Patent
[NASA-CASE-XNP-05114] c15 N71-17650
Method and apparatus for precision sizing and joining of large diameter tubes Patent
[NASA-CASE-XNP-05114-3] c15 N71-24865
Method and apparatus for precision sizing and joining of large diameter tubes Patent
[NASA-CASE-XNP-05114-2] c15 N71-26148

BERDIEL, C. H.
Selective image area control of X-ray film exposure density
[NASA-CASE-HFO-13808-1] c35 N77-24456
A thermal energy transformer
[NASA-CASE-HFO-14058-1] c44 N77-30616

BERENHARD, D. G.
Direct heating surface combustor
[NASA-CASE-LEW-11877-1] c44 N76-28646

BERENHARD, G. E.
Method of making fiber composites
[NASA-CASE-LEW-10424-2-2] c18 N72-25539

BERG, O. E.
Dust particle injector for hypervelocity accelerators Patent
[NASA-CASE-IGS-06628] c24 N71-16213
Cosmic dust sensor
[NASA-CASE-GSC-10503-1] c14 N72-20381

BERGLUND, R. A.
Erectable modular space station Patent
[NASA-CASE-XLA-00678] c31 N70-34296

BERKOPF, P. D.
Liquid metal slip ring
[NASA-CASE-LFW-12277-1] c33 N76-28472
Process for preparing liquid metal electrical contact device
[NASA-CASE-LEW-11978-1] c33 N77-26385

BERMAN, P. A.
Solar cell grid patterns
[NASA-CASE-HFO-13087-2] c44 N76-31666

BERNARDIN, R. H.
Measuring device Patent
[NASA-CASE-XMS-01546] c14 N70-40233

BERNATOWICZ, D. T.
Method of making silicon solar cell array
[NASA-CASE-LEW-11069-1] c44 N74-14784

BERNSEN, B.
Electrical apparatus for detection of thermal decomposition of insulation Patent
[NASA-CASE-XNP-03968] c14 N71-27186

BERRIER, B. L.
Thrust augmented spin recovery device
[NASA-CASE-LAR-11970-1] c08 N77-22147

BERRY, E. H.
Positive dc to positive dc converter Patent
[NASA-CASE-XNP-14301] c09 N71-23188
Positive dc to negative dc converter Patent
[NASA-CASE-XNP-08217] c03 N71-23239

BESSETTE, B. J.
Space suit
[NASA-CASE-HSC-12609-1] c05 N73-32012

BESWICK, A. G.
Lunar penetrometer Patent
[NASA-CASE-XLA-00934] c14 N71-22765

BEYUKIAN, C. S.
Tube dimpling tool Patent
[NASA-CASE-XMS-06876] c15 N71-21536

BEYLIN, C. H.
Pressure seal Patent
[NASA-CASE-HFO-10796] c15 N71-27068

BEAT, B. W.
Method of growing composites of the type exhibiting the Soret effect
[NASA-CASE-HFS-22926-1] c24 N77-27187

BRIWANDER, M. C.
Method for making conductors for ferrite memory arrays
[NASA-CASE-LAR-10994-1] c24 N75-13032

BIBBO, C.
Flexible seal for valves Patent
[NASA-CASE-XLF-00101] c15 N70-33376

BIRNIEK, T.
Metal containing polymers from cyclic tetrameric phenylphosphonitrilamides Patent
[NASA-CASE-BQM-10364] c06 N71-27363

BILBRO, J. W.
Focused laser Doppler velocimeter
[NASA-CASE-HFS-23178-1] c35 N77-10493

BILDERBACK, R. H.
Amplitude modulated laser transmitter Patent
[NASA-CASE-XMS-04269] c16 N71-22895

BILES, J. H., JR.
High impact pressure regulator Patent
[NASA-CASE-HFO-10175] c14 N71-18625

BILL, R. C.
Gas path seal
[NASA-CASE-LEW-12131-1] c37 N77-24498

BILLINGHAM, J.
Temperature controller for a fluid cooled garment
[NASA-CASE-ABC-10599-1] c05 N75-26071

BILLINGS, C. B.
Emergency escape system Patent

[NASA-CASE-XKS-07814] c15 N71-27067
BILLINGSLEY, F. C.
 Electro-optical scanning apparatus Patent
 Application
 [NASA-CASE-NFO-11106] c14 N70-34697
 Image data rate converter having a drum with a
 fixed head and a rotatable head
 [NASA-CASE-NFO-11655-1] c35 N74-11283
BILLMAN, K. W.
 Method and apparatus for wavelength tuning of
 liquid lasers
 [NASA-CASE-ERC-10187] c16 N69-31343
 Infrared tunable laser
 [NASA-CASE-ARC-10463-1] c09 N73-32111
 Alignment apparatus using a laser having a
 gravitationally sensitive cavity reflector
 [NASA-CASE-ARC-10444-1] c16 N73-33397
 Measurement of plasma temperature and density
 using radiation absorption
 [NASA-CASE-ARC-10598-1] c75 N74-30156
BILOW, N.
 Thiophenyl ether disiloxanes and trisiloxanes
 useful as lubricant fluids
 [NASA-CASE-MFS-22411-1] c37 N74-21058
BINCLEY, W. G.
 Voltage regulator with plural parallel power
 source sections Patent
 [NASA-CASE-GSC-10891-1] c10 N71-26626
BIRCHBOUGH, A. G.
 Switching regulator
 [NASA-CASE-LFW-11005-1] c09 N72-21243
 Electronic analog divider
 [NASA-CASE-LFW-11881-1] c33 N77-17354
 Sustained arc ignition system
 [NASA-CASE-LFW-12444-1] c33 N77-28385
BIRD, J. D.
 Jet shoes
 [NASA-CASE-XLA-08491] c05 N69-21380
BISCHOP, O. L.
 Broadband choke for antenna structure
 [NASA-CASE-XPS-05303] c07 N69-27462
BISCHOP, B. B.
 Optical alignment system Patent
 [NASA-CASE-IMP-02029] c14 N70-41955
BLACK, D. B.
 Horizontally mounted solar collector
 [NASA-CASE-MFS-23349-1] c44 N77-30613
BLACK, I. A.
 Apparatus for measuring thermal conductivity
 Patent
 [NASA-CASE-ICS-01052] c14 N71-15992
BLACK, J. H.
 Full wave modulator-demodulator amplifier
 apparatus
 [NASA-CASE-FEC-10072-1] c33 N74-14939
 Window comparator
 [NASA-CASE-FEC-10090-1] c33 N77-11296
BLACK, S. B.
 Automatic gain control system
 [NASA-CASE-XNS-05307] c09 N69-24330
BLACK, W. W.
 Triaxial antenna Patent
 [NASA-CASE-XGS-02290] c07 N71-28809
BLACKBAY, J. E.
 Temperature controller for a fluid cooled garment
 [NASA-CASE-ARC-10599-1] c05 N73-26071
BLACKSTOCK, T. A.
 Ferry system
 [NASA-CASE-LAR-10574-1] c11 N73-13257
BLAIR, G. B.
 Inorganic thermal control pigment Patent
 [NASA-CASE-IMP-02139] c18 N71-24184
BLAISE, H. T.
 Air cushion lift pad Patent
 [NASA-CASE-MFS-14685] c31 N71-15689
 Methods and apparatus employing vibratory energy
 for wrenching Patent
 [NASA-CASE-MFS-20586] c15 N71-17686
 Remote manipulator system
 [NASA-CASE-MFS-22024-1] c37 N76-15460
BLANKENSHIP, C. F.
 Tantalum modified ferritic iron base alloys
 [NASA-CASE-LFW-12095-1] c26 N76-17233
BLANCHARD, W. S., JR.
 Space capsule Patent
 [NASA-CASE-XLA-00149] c31 N70-37938
 Space capsule Patent
 [NASA-CASE-XLA-01332] c31 N71-15664
 Lateral displacement system for separated rocket
 stages Patent
 [NASA-CASE-XLA-04804] c31 N71-23008
 Quiet jet transport aircraft
 [NASA-CASE-IAB-11087-1] c02 N73-26008
 High lift aircraft
 [NASA-CASE-IAB-11252-1] c05 N75-25914
BLANCHET, J. P.
 Electrical feed-through connection for printed
 circuit boards and printed cable
 [NASA-CASE-IMP-01483] c14 N65-27431
BLAND, C.
 Bacteriostatic conformal coating and methods of
 application Patent
 [NASA-CASE-GSC-10007] c18 N71-16046
BLAND, W. H., JR.
 Survival couch Patent
 [NASA-CASE-XIA-00118] c05 N70-33285
BLANKENSHIP, C. F.
 Protective device for machine and metalworking
 tools Patent
 [NASA-CASE-XIE-01092] c15 N71-22797
BLAZE, C. J.
 Formed metal ribbon wrap Patent
 [NASA-CASE-XIE-00164] c15 N70-36411
BLOOMFIELD, H. S.
 In-situ laser retorting of oil shale
 [NASA-CASE-LFW-12217-1] c36 N77-18429
BLOSSER, E. B.
 Method for determining presence of OH in
 magnesium oxide
 [NASA-CASE-NFO-10774] c06 N72-17095
BLUE, J. W.
 Apparatus for producing high purity I-123
 [NASA-CASE-LFW-10518-2] c24 N72-28714
 Production of high purity I-123
 [NASA-CASE-LFW-10518-1] c24 N72-33681
 Apparatus for producing high purity I-123
 [NASA-CASE-LFW-10518-3] c31 N74-10476
 Method of producing I-123
 [NASA-CASE-LFW-11390-2] c25 N76-27383
 Production of I-123
 [NASA-CASE-LFW-11390-3] c25 N76-29379
BLUM, P.
 Rock sampling
 [NASA-CASE-IMP-10007-1] c46 N74-23068
 Rock sampling
 [NASA-CASE-IMP-09755] c46 N74-23069
BLUM, H. C.
 Parametric amplifiers with idler circuit feedback
 [NASA-CASE-IAB-10253-1] c09 N72-25258
BLUMRICH, J. P.
 Pivotal shock absorbing pad assembly Patent
 [NASA-CASE-IMP-03856] c31 N70-34159
 Landing pad assembly for aerospace vehicles Patent
 [NASA-CASE-IMP-02853] c31 N70-36654
 Double-acting shock absorber Patent
 [NASA-CASE-IMP-01045] c15 N70-40354
 Tank construction for space vehicles Patent
 [NASA-CASE-IMP-01899] c31 N70-41948
 Docking structure for spacecraft Patent
 [NASA-CASE-IMP-05941] c31 N71-23912
 Omnidirectional wheel
 [NASA-CASE-MFS-21309-1] c37 N74-18125
BLUTINGER, B.
 Signal generator
 [NASA-CASE-IMP-05612] c09 N69-21468
BLYMILLER, B. B.
 Microcircuit negative cutter
 [NASA-CASE-XLA-09843] c15 N72-27485
BOATRIGHT, W. B.
 Apparatus and method for generating large mass
 flow of high temperature air at hypersonic
 speeds
 [NASA-CASE-IAB-10578-1] c12 N73-25262
BOCKWOLDT, W. B.
 Narrow bandwidth video Patent
 [NASA-CASE-INS-06740-1] c07 N71-26579
BOEDY, D. D.
 Power supply circuit Patent
 [NASA-CASE-INS-00913] c10 N71-23543
BOERN, J.
 Gravity device Patent
 [NASA-CASE-IMP-00424] c11 N70-38196
BOER, K. W.
 High field CdS detector for infrared radiation
 [NASA-CASE-LAR-11027-1] c35 N74-18088
BOEX, H. W.
 Filter regeneration systems

[NASA-CASE-MSC-14273-1] c34 N75-33342
BOGNER, R. S.
 Storage battery comprising negative plates of a wedge shaped configuration
 [NASA-CASE-MSC-11806-1] c44 N74-19693
BOGUSZ, P. J.
 Pressure transducer calibrator Patent
 [NASA-CASE-XNP-01660] c14 N71-23036
BOIES, R. D.
 Instrument for measuring potentials on two dimensional electric field plots Patent
 [NASA-CASE-XIA-08493] c10 N71-19421
BOISSEvain, A. G.
 Optical machine tool alignment indicator Patent
 [NASA-CASE-XAC-09489-1] c15 N71-26673
BOLT, C. A., JR.
 Broadband choke for antenna structure
 [NASA-CASE-XMS-05303] c07 N69-27462
BOND, W. W.
 Connector internal force gauge Patent
 [NASA-CASE-XNP-03918] c14 N71-23087
BONISCH, P.
 Automatically lockable axially extensible strut
 [NASA-CASE-LAR-11900-1] c05 N77-18134
BONN, J. L.
 Wire grid forming apparatus Patent
 [NASA-CASE-XIE-00023] c15 N70-33330
BONNEE, T. F., JR.
 Quiet jet transport aircraft
 [NASA-CASE-LAR-11087-1] c02 N73-26008
BONO, P.
 Recoverable single stage spacecraft booster Patent
 [NASA-CASE-XMP-01973] c31 N70-41588
BOODLEY, L. E.
 Connector strips-positive, negative and T tabs
 [NASA-CASE-XGS-01395] c03 N69-21539
BOOTE, P. W.
 Condenser - Separator
 [NASA-CASE-XIA-08645] c15 N69-21465
 Separator Patent
 [NASA-CASE-XIP-00415] c15 N71-16079
 Thermal pump-compressor for space use Patent
 [NASA-CASE-XLA-00377] c33 N71-17610
 Soldering device Patent
 [NASA-CASE-XLA-08911] c15 N71-27214
 Air removal device
 [NASA-CASE-XIA-8914] c15 N73-12492
 Zero gravity liquid mixer
 [NASA-CASE-LAR-10195-1] c15 N73-19458
 Centrifugal lyophobic separator
 [NASA-CASE-LAR-10194-1] c34 N74-30608
 Air removal device
 [NASA-CASE-XIA-8914-2] c34 N76-23522
 Zero gravity separator
 [NASA-CASE-LEW-10344-1] c35 N76-33470
BOOTH, R. A.
 Solid state switch
 [NASA-CASE-XNP-09228] c09 N69-27500
BORELLI, M. I.
 Adaptive tracking notch filter system Patent
 [NASA-CASE-XMP-01892] c10 N71-22986
BOROSCH, H. B.
 Wide range linear fluxgate magnetometer Patent
 [NASA-CASE-XGS-01587] c14 N71-15962
BOSCO, G. B., JR.
 Rotating shaft seal Patent
 [NASA-CASE-XNP-02862-1] c15 N71-26294
BOSHERS, W. A.
 Battery testing device
 [NASA-CASE-MFS-21761-1] c44 N74-27519
 Rapid activation and checkcut device for batteries
 [NASA-CASE-MFS-22749-1] c44 N76-14601
 Lead-oxygen dc power supply system having a closed loop oxygen and water system
 [NASA-CASE-MFS-23059-1] c44 N76-27664
BOSTON, E. E.
 X-Y alphanumeric character generator for oscilloscopes
 [NASA-CASE-GSC-11582-1] c33 N75-19517
BOTTCHS, D. J.
 Turnstile and flared cone UHF antenna
 [NASA-CASE-LAR-11970-1] c33 N76-14372
BOULDER, D. L.
 Multilevel metallization method for fabricating a metal oxide semiconductor device
 [NASA-CASE-MFS-23541-1] c33 N77-27308
BOURKE, D. G.
 Data compression system with a minimum time delay unit Patent

[NASA-CASE-XNP-08832] c08 N71-12506
BOUSHAN, W. G.
 Hingeless helicopter rotor with improved stability
 [NASA-CASE-ABC-10807-1] c05 N77-17029
BOWER, K. F.
 Buffered analog converter
 [NASA-CASE-KSC-10397] c08 N72-25206
BOXWELL, D. A.
 Acoustically swept rotor
 [NASA-CASE-ABC-11106-1] c05 N77-31130
BOYLE, J. C.
 Balance torquemeter Patent
 [NASA-CASE-XGS-01013] c14 N71-23725
BOYLE, J. W., JR.
 Adjustable attitude guide device Patent
 [NASA-CASE-XIA-07911] c15 N71-15571
 Canister closing device Patent
 [NASA-CASE-XLA-01446] c15 N71-21528
BOZAJIAN, J. M.
 Thermal switch Patent
 [NASA-CASE-XNP-00463] c33 N70-36847
BOZEK, J. B.
 Flexible formulated plastic separators for alkaline batteries
 [NASA-CASE-LEW-12363-1] c44 N76-19552
BRACKEN, P. A.
 Telemetry processor
 [NASA-CASE-GSC-11388-1] c07 N73-24187
BRADFIELD, S. P., III
 Unbalanced quadriphase demodulator
 [NASA-CASE-MSC-14840-1] c32 N77-24331
BRADLEY, R. H.
 Emergency earth orbital escape device
 [NASA-CASE-MSC-13281] c31 N72-18859
 A method of delivering a vehicle to earth orbit and returning the reusable portion thereof to earth
 [NASA-CASE-MSC-12391] c30 N73-12884
BRADY, J. C.
 Surface roughness detector Patent
 [NASA-CASE-XLA-00203] c14 N70-34161
BRANDHORST, H. W., JR.
 Rapidly pulsed, high intensity, incoherent light source
 [NASA-CASE-XIE-2529-3] c33 N74-20859
 High power laser apparatus and system
 [NASA-CASE-XIE-2529-2] c36 N75-27364
 Solar cell surface treatment
 [NASA-CASE-LEW-11330-1] c44 N76-14612
 Solar cell surface treatment
 [NASA-CASE-LEW-11330-2] c44 N76-33624
 Improved backwall cell
 [NASA-CASE-LEW-12236-1] c44 N77-17565
 Solar cell assembly
 [NASA-CASE-LEW-11549-1] c44 N77-19571
 Application of semiconductor diffusants to solar cells by screen printing
 [NASA-CASE-LEW-12775-1] c44 N77-24589
BRANSTETTER, J. B.
 Black-body furnace Patent
 [NASA-CASE-XIE-01399] c33 N71-15625
BRANTLEY, J. W.
 Leading edge protection for composite blades
 [NASA-CASE-LEW-12550-1] c24 N77-19170
BRANTLEY, L. W., JR.
 Mount for continuously orienting a collector dish in a system adapted to perform both diurnal and seasonal solar tracking
 [NASA-CASE-MFS-23267-1] c35 N77-20401
 Solar energy absorber
 [NASA-CASE-MFS-22743-1] c44 N76-22657
 Solar energy trap
 [NASA-CASE-MFS-22744-1] c44 N76-24696
 Thermal energy storage system
 [NASA-CASE-MFS-23167-1] c44 N76-31667
BRASCHWITZ, J. B.
 External liquid-spray cooling of turbine blades Patent
 [NASA-CASE-XIE-00037] c28 N70-33372
BRAUN, W.
 Ultraviolet atomic emission detector
 [NASA-CASE-RQN-10756-1] c14 N72-25428
BRAWNER, C. C.
 Specific wavelength colorimeter
 [NASA-CASE-MSC-14081-1] c35 N74-27860
BRAWNER, E. L.
 Color perception tester
 [NASA-CASE-KSC-10278] c05 N72-16015

BREAUULT, R. P.
System for the measurement of ultra-low stray light levels
[NASA-CASE-MFS-23513-1] c74 N77-14842

BRECKENRIDGE, R. A.
Vapor phase growth of groups 3-5 compounds by hydrogen chloride transport of the elements
[NASA-CASE-IAR-11144-1] c25 N75-26043

BRECKENRIDGE, R. A.
Magnetometer
[NASA-CASE-IAR-11617-2] c35 N77-17430

BREED, L. L.
Fluorinated esters of polycarboxylic acids
[NASA-CASE-MFS-21040-1] c06 N73-30098

BREED, L. W.
Preparation of ordered polyarylenesiloxane/polyethers
[NASA-CASE-IMP-10753] c06 N71-11237

BRENNER, R. F.
Method and system for respiration analysis Patent
[NASA-CASE-IFR-08403] c05 N71-11202

BRENNAN, B. J.
Derivation of a tangent function using an integrated circuit four-quadrant multiplier
[NASA-CASE-MSC-13907-1] c10 N73-26230

BREITWIESER, R.
High current electrical lead
[NASA-CASE-LFW-10950-1] c33 N74-27683

BREJCHA, A. G., JR.
Coaxial cable connector Patent
[NASA-CASE-IMP-04732] c09 N71-20851

BREY, E.
Frequency division multiplex technique
[NASA-CASE-MSC-10521] c07 N73-20176

BREY, E.
FM/CW radar system
[NASA-CASE-MFS-22234-1] c32 N76-33364

BRICKER, R. W.
Mass measuring system Patent
[NASA-CASE-IHS-03371] c05 N70-42000

BRIGHT, C. W.
Flame-resistant liquid oxygen compatible neoprene rubber composition
[NASA-CASE-MSC-11020-1] c27 N77-23267

BRINICH, P. F.
Electrothermal rockets having improved heat exchangers Patent
[NASA-CASE-IIF-01783] c28 N70-34175

BRINKS, E. J.
Plating nickel on aluminum castings Patent
[NASA-CASE-IMP-04148] c17 N71-24830

BRISKEN, A. P.
Automatic transponder
[NASA-CASE-GSC-12075-1] c32 N77-31350

BRISSENDEN, R. F.
Cable arrangement for rigid tethering Patent
[NASA-CASE-XIA-02332] c32 N71-17609

BRITT, T. O.
Remote lightning monitor system
[NASA-CASE-MSC-11031-1] c33 N77-21319

BRITZ, W. J.
Rapid activation and checkout device for batteries
[NASA-CASE-MFS-22749-1] c44 N76-14601

BRITZ, W. J.
Lead-oxygen dc power supply system having a closed loop oxygen and water system
[NASA-CASE-MFS-23059-1] c44 N76-27664

BROCK, F. J.
Gauge calibration by diffusion
[NASA-CASE-XGS-07752] c14 N73-30390

BROCK, F. J.
Ultrahigh vacuum measuring ionization gauge
[NASA-CASE-XIA-05087] c14 N73-30391

BROCKMAN, R. E.
Charge storage diode modulators and demodulators
[NASA-CASE-WFO-10189-1] c33 N77-21314

BRODER, J. D.
Method of making electrical contact on silicon solar cell and resultant product Patent
[NASA-CASE-XLE-04787] c03 N71-20492

BRODER, J. D.
Method of making silicon solar cell array
[NASA-CASE-LFW-11069-1] c44 N74-14784

BRODER, J. D.
Covered silicon solar cells and method of manufacture
[NASA-CASE-LFW-11065-2] c44 N76-14600

BRODER, J. D.
Silicon nitride coated, plastic covered solar cell
[NASA-CASE-LFW-11496-1] c44 N77-14580

BRODERICK, J. C.
Solid state television camera system Patent
[NASA-CASE-IMP-06092] c07 N71-24612

BRODERICK, B. F.
Signal ratio system utilizing voltage controlled oscillators Patent
[NASA-CASE-IMP-04367] c09 N71-23545

BRODERICK, B. F.
Radar antenna system for acquisition and tracking Patent
[NASA-CASE-IHS-09610] c07 N71-24625

BRODIE, S. B.
Variable ratio mixed-mode bilateral master-slave control system for shuttle remote manipulator system
[NASA-CASE-MSC-14245-1] c18 N75-27041

BRODL, S. S.
Numerical computer peripheral interactive device with manual controls
[NASA-CASE-WFO-11497] c08 N73-25206

BROGAN, C. L.
Dual output variable pitch turbofan actuation system
[NASA-CASE-LFW-12419-1] c07 N77-14025

BROOKS, A. D.
Particulate and aerosol detector
[NASA-CASE-IAR-11434-1] c35 N76-22509

BROOKS, G. W.
Impact simulator Patent
[NASA-CASE-XIA-00493] c11 N70-34786

BROOKS, G. W.
Flexible ring slosh damping baffle Patent
[NASA-CASE-IAR-10317-1] c32 N71-16103

BROOKS, G. W.
Lunar penetrometer Patent
[NASA-CASE-XIA-00934] c14 N71-22765

BROOKS, J. D.
Continuously operating induction plasma accelerator Patent
[NASA-CASE-XIA-01354] c25 N70-36946

BROOKS, R. A.
Capacitive tank gaging apparatus being independent of liquid distribution
[NASA-CASE-MFS-21629] c14 N72-22442

BROSH, A.
Flow separation detector
[NASA-CASE-ABC-11046-1] c35 N76-28535

BROUSSARD, R.
Optical tracking mount Patent
[NASA-CASE-MFS-14017] c14 N71-26627

BROWN, R. V.
Two wavelength double pulse tunable dye laser
[NASA-CASE-IAR-12012-1] c36 N77-10517

BROWN, D.
Radial module space station Patent
[NASA-CASE-IHS-01906] c31 N70-41373

BROWN, D. W.
Phase-locked loop with sideband rejecting properties Patent
[NASA-CASE-IMP-02723] c07 N70-41680

BROWN, E. L.
Sprayable low density ablator
[NASA-CASE-MFS-23506-1] c24 N77-15105

BROWN, G. A.
Integrated circuit including field effect transistor and ceramic resistor
[NASA-CASE-GSC-10835-1] c09 N72-33205

BROWN, G. V.
Method of fabricating a twisted composite superconductor
[NASA-CASE-LFW-11015] c26 N73-32571

BROWN, G. V.
Magnetocaloric pump
[NASA-CASE-LFW-11672-1] c37 N74-27904

BROWN, G. V.
Magnetic heat pumping
[NASA-CASE-LFW-12508-1] c34 N77-15343

BROWN, G. V.
Magnetic heat pumping
[NASA-CASE-LFW-12508-2] c34 N77-32435

BROWN, H. H.
Reaction tester
[NASA-CASE-MSC-13604-1] c05 N73-13114

BROWN, J. W.
Reduced gravity fecal collector seat and urinal
[NASA-CASE-MFS-22102-1] c54 N74-20725

BROWN, K. H.
Phase modulator Patent
[NASA-CASE-MSC-13201-1] c07 N71-28429

BROWN, R. D.
Deployable flexible tunnel
[NASA-CASE-MFS-22636-1] c37 N76-22540

BROWN, R. L.
Gimbaled, partially submerged rocket nozzle Patent
[NASA-CASE-IMP-01544] c28 N70-34162

BROWN, R. H.
Multiple pass reimaging optical system
[NASA-CASE-ABC-10194-1] c23 N73-20741

BROWN, W. E., III
Method and means for providing an absolute power measurement capability Patent

[NASA-CASE-ERC-11020]	c14 N71-26774	[NASA-CASE-NFO-11134]	c09 N72-21246
Clear air turbulence detector		BURCH, C. F.	
[NASA-CASE-ERC-10081]	c14 N72-28437	Grinding arrangement for ball nose milling cutters	
Method and apparatus for measuring solar activity and atmospheric radiation effects		[NASA-CASE-LAR-10450-1]	c37 N74-27905
[NASA-CASE-ERC-10276]	c14 N73-26432	BURCH, J. L.	
BROWNING, R. E.		Two speed drive system	
Flexible seal for valves Patent		[NASA-CASE-MFS-20645-1]	c37 N74-23070
[NASA-CASE-XLE-00101]	c15 N70-33376	Automatically operable self-leveling load table	
BROYLES, B. F.		[NASA-CASE-MFS-22039-1]	c09 N75-12968
Parallel plate viscometer Patent		Actuator device for artificial leg	
[NASA-CASE-XNF-09462]	c14 N71-17584	[NASA-CASE-MFS-23225-1]	c52 N77-14735
Method of making hollow elastomeric bodies		Combined docking and grasping device	
[NASA-CASE-NFO-13535-1]	c37 N76-31524	[NASA-CASE-MFS-23088-1]	c37 N77-23483
BROYLES, B. B.		Apparatus for assembling space structure	
Parallel plate viscometer Patent		[NASA-CASE-MFS-23579-1]	c12 N77-31213
[NASA-CASE-XNF-09462]	c14 N71-17584	BURCHAM, T. W.	
BRUCE, M. B., JR.		Controlled release device Patent	
Computerized system for translating a torch head		[NASA-CASE-XMS-03338]	c15 N71-24043
[NASA-CASE-MFS-23620-1]	c37 N77-24497	BURCHER, E. E.	
BRUCE, R. A.		Laser communication system for controlling several functions at a location remote to the laser	
Specialized halogen generator for purification of water Patent		[NASA-CASE-LAR-10311-1]	c16 N73-16536
[NASA-CASE-XIA-08913]	c14 N71-28933	Transmitting and reflecting diffuser	
Air removal device		[NASA-CASE-LAR-10385-3]	c23 N73-32538
[NASA-CASE-XIA-8914]	c15 N73-12492	Transmitting and reflecting diffuser	
Zero gravity liquid mixer		[NASA-CASE-LAR-10385-2]	c70 N74-13436
[NASA-CASE-LAR-10195-1]	c15 N73-19458	Automatic focus control for facsimile cameras	
Centrifugal lyophobic separator		[NASA-CASE-LAR-11213-1]	c35 N75-15014
[NASA-CASE-LAR-10194-1]	c34 N74-30608	Spectrometer integrated with a facsimile camera	
Air removal device		[NASA-CASE-LAR-11207-1]	c35 N75-19613
[NASA-CASE-XIA-8914-2]	c34 N76-23522	Device for measuring the contour of a surface	
BRUNSTEIN, S. A.		[NASA-CASE-LAR-11869-1]	c35 N77-10497
Dual frequency microwave reflex feed		BURDIN, C.	
[NASA-CASE-NFC-13091-1]	c09 N73-12214	Phase-locked servo system	
BRYAN, C. J.		[NASA-CASE-MFS-22073-1]	c33 N75-13139
Autoignition test cell Patent		BURGETT, F. A.	
[NASA-CASE-KSC-10198]	c11 N71-28629	Measuring device Patent	
BRYAN, M. B.		[NASA-CASE-XMS-01546]	c14 N70-40233
Wind tunnel model damper Patent		Process for conditioning tanned sharkskin and articles made therefrom Patent	
[NASA-CASE-XIA-09480]	c11 N71-33612	[NASA-CASE-XMS-09691-1]	c18 N71-15545
BRYANT, E. L.		BURK, S. M., JR.	
Fatigue testing device Patent		Deployable flexible ventral fins for use as an emergency spin recovery device in aircraft	
[NASA-CASE-XLA-02131]	c32 N70-42003	[NASA-CASE-LAR-10753-1]	c08 N74-30421
BRYANT, W. E.		BURKE, J. E.	
Digital controller for a foam folding machine		Optical spin compensator	
[NASA-CASE-LAF-10688-1]	c37 N74-21056	[NASA-CASE-XGS-02401]	c14 N69-27485
BRYSCH, E. P.		BURKHART, J. A.	
Soil penetrometer		Magneto-plasma-dynamic arc thruster	
[NASA-CASE-XNF-05530]	c14 N73-32321	[NASA-CASE-LFW-11180-1]	c25 N73-25760
BUCHANAN, B. I.		BURKLEY, R. A.	
Hypersonic test facility Patent		Panelized high performance multilayer insulation Patent	
[NASA-CASE-XIA-00378]	c11 N71-15925	[NASA-CASE-MFS-14023]	c33 N71-25351
Hypersonic test facility Patent		BURNETT, J. E.	
[NASA-CASE-XIA-05378]	c11 N71-21475	Improved tissue macerating instrument	
BUCHHELE, D. B.		[NASA-CASE-LFW-12668-1]	c52 N76-23837
Optical torque meter Patent		BURNHAM, D. C.	
[NASA-CASE-XLE-00503]	c14 N70-34818	Method and apparatus for wavelength tuning of liquid lasers	
BUCHHOLD, T. A.		[NASA-CASE-ERC-10187]	c16 N69-31343
Superconductive accelerometer Patent		BURNS, B. A.	
[NASA-CASE-XNF-01099]	c14 N71-15969	Ablative resin Patent	
BUCHMILLER, L. D.		[NASA-CASE-XLE-05913]	c33 N71-14032
Folded traveling wave maser structure Patent		Reinforced structural plastics	
[NASA-CASE-XNF-05219]	c16 N71-15550	[NASA-CASE-LFW-10199-1]	c27 N74-23125
BUCKLEY, D. B.		BURNS, F. E.	
Gas lubricant compositions Patent		Biomedical radiation detecting probe Patent	
[NASA-CASE-XLE-00353]	c18 N70-39897	[NASA-CASE-XMS-01177]	c05 N71-19440
Metallic film diffusion for boundary lubrication Patent		BURNS, E. E.	
[NASA-CASE-XLE-01765]	c18 N71-10772	High pulse rate high resolution optical radar system	
Alloys for bearings Patent		[NASA-CASE-NFO-11426]	c07 N73-26119
[NASA-CASE-XLE-05033]	c15 N71-23810	BURNS, E. E.	
Metallic film diffusion for boundary lubrication Patent		Protected isotope heat source	
[NASA-CASE-XLE-10337]	c15 N71-24046	[NASA-CASE-LFW-11227-1]	c73 N75-30876
BUHLER, G. V.		BURROUS, C. W.	
Meter for use in detecting tension in straps having predetermined elastic characteristics		Temperature compensated light source using a light emitting diode	
[NASA-CASE-MFS-22189-1]	c35 N75-19615	[NASA-CASE-AEC-10467-1]	c09 N73-14214
BULLINGER, H. E.		BURROWS, D. I.	
Photoetching of metal-oxide layers		Insulating structure Patent	
[NASA-CASE-ERC-10108]	c06 N72-21094	[NASA-CASE-XNF-00341]	c15 N70-33323
BURCE, R. C.		BURTON, D. E.	
Closed loop ranging system Patent		Garments for controlling the temperature of the body Patent	
[NASA-CASE-XNF-01501]	c21 N70-41930	[NASA-CASE-XMS-10269]	c05 N71-24147
Automatic carrier acquisition system			
[NASA-CASE-NFO-11628-1]	c07 N73-30113		
BUNKER, E. B., JR.			
Automated equipotential platter			

BURTON, W. A.
 Endless tape cartridge Patent
 [NASA-CASE-XGS-00769] c14 N70-41647
 Annular slit cclloid thruster Patent
 [NASA-CASE-GSC-10709-1] c28 N71-25213
BOSEHANN, A.
 Plasma accelerator Patent
 [NASA-CASE-XLA-00675] c25 N70-33267
BUSH, H. G.
 Vacuum pressure molding technique
 [NASA-CASE-LAR-10073-1] c37 N76-24575
 Lightweight structural columns
 [NASA-CASE-LAR-12095-1] c39 N77-27432
BUTLER, D. H.
 Miniature vibration isolator Patent
 [NASA-CASE-XLA-01019] c15 N70-40156
 Radio frequency filter device
 [NASA-CASE-XLA-02609] c09 N72-25256
BUTMAN, S.
 Signal phase estimator
 [NASA-CASE-NFO-11203] c10 N72-20224
 Multichannel telemetry system
 [NASA-CASE-NFO-11572] c07 N73-16121
 Receiver with an improved phase lock loop in a
 multichannel telemetry system with suppressed
 carrier
 [NASA-CASE-NFO-11593-1] c07 N73-28012
BUTMAN, S. A.
 Multiple rate digital command detection system
 with range clean-up capability
 [NASA-CASE-NFO-13753-1] c32 N77-20289
BUZZARD, R. J.
 Radial heat flux transformer
 [NASA-CASE-NFO-10828] c33 N72-17948
BYERS, D. C.
 Electrostatic thruster with improved insulators
 Patent
 [NASA-CASE-IIX-01902] c28 N71-10574
 Sputtering holes with ion beamlets
 [NASA-CASE-LEW-11646-1] c20 N74-31269
BYNUM, B. G.
 Response analyzers for sensors Patent
 [NASA-CASE-NFS-11204] c14 N71-29134
 Ergometer
 [NASA-CASE-NFS-21109-1] c15 N73-27941
BYRD, A. W.
 Heat pipe thermionic diode power system Patent
 [NASA-CASE-IXF-05843] c03 N71-11055
 Power system with heat pipe liquid coolant lines
 Patent
 [NASA-CASE-NFS-14114-2] c09 N71-24807
 Isothermal cover with thermal reservoirs Patent
 [NASA-CASE-NFS-20355] c33 N71-25353
 Power system with heat pipe liquid coolant lines
 Patent
 [NASA-CASE-NFS-14114] c33 N71-27862
 Thermoelectric power system
 [NASA-CASE-NFS-22002-1] c44 N76-16612
BYRD, J. D.
 Elastomeric silazane polymers and process for
 preparing the same Patent
 [NASA-CASE-IXF-04133] c06 N71-20717
BYRD, W. E.
 Thermally conductive polymers
 [NASA-CASE-GSC-11304-1] c06 N72-21105
BYRNE, P.
 BCD to decimal decoder Patent
 [NASA-CASE-XRS-06167] c08 N71-24890
 Video sync processor Patent
 [NASA-CASE-RSC-10002] c10 N71-25865
 Automatic frequency control loop including
 synchronous switching circuits
 [NASA-CASE-RSC-10393] c09 N72-21247
 Digital servo controller
 [NASA-CASE-RSC-10769-1] c33 N74-29556

C

CABLE, C. W.
 Solar cell assembly test method
 [NASA-CASE-NFO-10401] c03 N72-20033
CABLE, W. L.
 Rotary solenoid shutter drive assembly and
 rotary inertia damper and stop plate assembly
 [NASA-CASE-GSC-11560-1] c33 N74-20861
CACOSSA, R. A.
 Method of detecting impending saturation of
 magnetic cores
 [NASA-CASE-ERC-10089] c23 N72-17747
CAHILL, W. E.
 Positive locking check valve Patent
 [NASA-CASE-IXS-09310] c15 N71-22706
CALABRO, J. B.
 Resilient wheel Patent
 [NASA-CASE-NFS-13929] c15 N71-27091
CALLAHAN, D. E.
 Solid state television camera system Patent
 [NASA-CASE-IXF-06092] c07 N71-24612
CALVERT, H. F.
 Modification and improvements to cooled blades
 Patent
 [NASA-CASE-XLE-00092] c15 N70-33264
CANACHO, S. L.
 Protective circuit of the spark gap type
 [NASA-CASE-IAC-08981] c09 N69-39897
CAMBRA, J. H.
 Overvoltage protection network
 [NASA-CASE-ARC-10197-1] c33 N74-17929
CANERON, J. E.
 Method and system for in vivo measurement of
 bone tissue using a two level energy source
 [NASA-CASE-MSC-14276-1] c52 N77-14737
CAMP, D. W.
 Anemometer with braking mechanism Patent
 [NASA-CASE-IXF-05224] c14 N71-23726
 Maxometers (peak wind speed anemometers)
 [NASA-CASE-NFS-20916] c14 N73-25460
CAMP, R. L.
 Automatic signal range selector for metering
 devices Patent
 [NASA-CASE-IXS-06497] c14 N71-26244
CAMPBELL, B. A.
 Epoxy-aziridine polymer product Patent
 [NASA-CASE-NFO-10701] c06 N71-28620
CAMPBELL, C. C., JR.
 Discrete local altitude sensing device Patent
 [NASA-CASE-IXS-03792] c14 N70-41812
CAMPBELL, D. E.
 Time division radio relay synchronizing system
 using different sync code words for in sync
 and out of sync conditions Patent
 [NASA-CASE-GSC-10373-1] c07 N71-19773
CAMPBELL, P. D.
 Radiant source tracker independent of
 nonconstant irradiance
 [NASA-CASE-NFO-11686] c14 N73-25462
CAMPBELL, G. E.
 Self-recording portable soil penetrometer
 [NASA-CASE-NFS-20774] c14 N73-19420
CAMPBELL, G. W.
 Method and system for respiration analysis Patent
 [NASA-CASE-IXF-08403] c05 N71-11202
CAMPBELL, J. G.
 Multislit film cooled pyrolytic graphite rocket
 nozzle Patent
 [NASA-CASE-IXF-04389] c28 N71-20942
 Tube sealing device Patent
 [NASA-CASE-NFO-10431] c15 N71-29132
CAMPBELL, R. A.
 Redundant hydraulic control system for actuators
 [NASA-CASE-NFS-20944] c15 N73-13466
CAMPBELL, B. E., JR.
 Focused laser Doppler velocimeter
 [NASA-CASE-NFS-23178-1] c35 N77-10493
CAMPBELL, I. G.
 Omnidirectional slot antenna for mounting on
 cylindrical space vehicle
 [NASA-CASE-LAR-10163-1] c09 N72-25247
CAMPEN, C. F., JR.
 Automated system for identifying traces of
 organic chemical compounds in aqueous solutions
 [NASA-CASE-NFO-13063-1] c25 N76-18245
CANCRO, C. A.
 Low power drain semi-conductor circuit
 [NASA-CASE-XGS-04999] c09 N69-24317
 Wide range data compression system Patent
 [NASA-CASE-IGS-02612] c08 N71-19435
 Passive synchronized spike generator with high
 input impedance and low output impedance and
 capacitor power supply Patent
 [NASA-CASE-IGS-03632] c09 N71-23311
 Fast response low power drain logic circuits
 [NASA-CASE-GSC-10878-1] c10 N72-22236
CANICATTI, C. L.
 Voltage monitoring system
 [NASA-CASE-RSC-10736-1] c33 N75-19521
CANNING, T. H.
 Shock-layer radiation measurement

[NASA-CASE-XAC-02970] c14 N69-39896
 Hypervelocity gun Patent
 [NASA-CASE-XAC-05902] c11 N71-18578
 Heater-mixer for stored fluids
 [NASA-CASE-ABC-10442-1] c35 N74-15093
 Bimetallic fluid displacement apparatus
 [NASA-CASE-ABC-10441-1] c35 N74-15126
CANTOR, C.
 Attitude control system Patent
 [NASA-CASE-XGS-04393] c21 N71-14159
 Amplifier clamping circuit for horizon scanner
 Patent
 [NASA-CASE-XGS-01784] c10 N71-20782
 Roll alignment detector
 [NASA-CASE-GSC-10514-1] c14 N72-20379
CANVEL, B.
 Video communication system and apparatus Patent
 [NASA-CASE-IMP-06611] c07 N71-26102
CAPLETTE, R. K.
 Current steering commutator
 [NASA-CASE-NFO-10743] c08 N72-21199
CAPPS, J. E.
 Two-step rocket engine bipropellant valve Patent
 [NASA-CASE-XMS-04890-1] c15 N70-22192
CABEN, R. P.
 Dual solid cryogenics for spacecraft refrigeration
 Patent
 [NASA-CASE-GSC-10188-1] c23 N71-24725
CARL, C.
 Apparatus for deriving synchronizing pulses from
 pulses in a single channel PCM communications
 system
 [NASA-CASE-NFO-11302-1] c07 N73-13149
 Method and apparatus for a single channel
 digital communications system
 [NASA-CASE-NPO-11302-2] c32 N74-10132
 Digital second-order phase-locked loop
 [NASA-CASE-NFO-11905-1] c33 N74-12887
CARL, G. B.
 Air conditioned suit
 [NASA-CASE-LAR-10076-1] c05 N73-20137
CARLE, C. E.
 Reel safety brake
 [NASA-CASE-GSC-11960-1] c37 N77-14479
CARLISLE, T. E.
 Method and apparatus for controllably heating
 fluid Patent
 [NASA-CASE-IMP-04237] c33 N71-16278
CARLSCH, A. W.
 Pulse-width modulation multiplier Patent
 [NASA-CASE-XER-09213] c07 N71-12390
CARLSCH, B. W.
 Supersonic aircraft Patent
 [NASA-CASE-XIA-04451] c02 N71-12243
CARLSCH, W. C. A.
 Electric arc device for heating gases Patent
 [NASA-CASE-XAC-00319] c25 N70-41628
CARRIN, D. L., JR.
 Anti-fog composition
 [NASA-CASE-MSC-13530-2] c23 N75-14834
CARMODY, R. J.
 Honeycomb panel and method of making same Patent
 [NASA-CASE-IMP-01402] c18 N71-21651
CARON, P. E.
 Logarithmic function generator utilizing an
 exponentially varying signal in an inverse
 manner
 [NASA-CASE-ERC-10267] c09 N72-23173
 Phase control circuits using frequency
 multiplications for phased array antennas
 [NASA-CASE-ERC-10285] c10 N73-16206
CARPINI, T. D.
 Flow velocity and directional instrument
 [NASA-CASE-LAR-10855-1] c14 N73-13415
CARR, W. P.
 Split nut separation system Patent
 [NASA-CASE-IMP-06914] c15 N71-21489
CARRAWAY, J. E.
 Miniature multichannel radiometer system
 [NASA-CASE-NFO-13065-1] c52 N74-26625
CARBOLL, W. P.
 Stabilized zinc oxide coating compositions Patent
 [NASA-CASE-IMP-07770-2] c18 N71-26772
CARSON, J. W.
 Quasi-optical microwave component Patent
 [NASA-CASE-ERC-10011] c07 N71-29065
CARSON, P. B.
 Array phasing device Patent
 [NASA-CASE-ERC-10046] c10 N71-18722
CARSON, W. H., JR.
 Didymium hydrate additive to nickel hydroxide
 electrodes Patent
 [NASA-CASE-XGS-03505] c03 N71-10608
CARTER, A. F.
 Plasma accelerator Patent
 [NASA-CASE-XIA-00675] c25 N70-33267
 Method and apparatus for producing a plasma Patent
 [NASA-CASE-XIA-00147] c25 N70-34661
CARTER, J. M.
 Sprayable low density ablator
 [NASA-CASE-MFS-23506-1] c24 N77-15105
 Apparatus for automatically spraying a coating
 material
 [NASA-CASE-MFS-23506-2] c37 N77-20441
CARTER, W. K.
 Emergency earth orbital escape device
 [NASA-CASE-MSC-13281] c31 N72-18859
CARUSO, A. J.
 Sorption vacuum trap Patent
 [NASA-CASE-XER-09519] c14 N71-18483
CARUSO, V. P.
 Method of peening and portable peening gun
 [NASA-CASE-MFS-23047-1] c37 N76-18454
CASE, H. C.
 Space suit
 [NASA-CASE-MSC-12609-1] c05 N73-32012
CASEY, L. O.
 Electrical load protection device Patent
 [NASA-CASE-MSC-12135-1] c09 N71-12526
CASHION, K. D.
 Solar optical telescope dome control system Patent
 [NASA-CASE-MSC-10966] c14 N71-19568
 Radiation detector readout system Patent
 [NASA-CASE-XMS-03478] c14 N71-21040
CASON, B. L.
 Cable fault locator
 [NASA-CASE-MSC-10899-1] c33 N77-28394
CASTLE, K. D.
 Shielded conductor cable system
 [NASA-CASE-MSC-12745-1] c33 N77-13338
CASTLEMAN, K.
 Automated clinical system for chromosome analysis
 [NASA-CASE-NFO-13913-1] c52 N77-19750
CAUDILL, L. O.
 Long range laser traversing system
 [NASA-CASE-GSC-11262-1] c36 N74-21091
CECCON, H. L.
 Optical pump and driver system for lasers
 [NASA-CASE-ERC-10283] c16 N72-25485
CEPOLLENA, F. J.
 Strain gauge measuring techniques Patent
 [NASA-CASE-XGS-04478] c14 N71-24233
CERINI, D. J.
 Hydrogen-rich gas generator
 [NASA-CASE-NFO-13560-1] c44 N77-10636
CHAMBERLAIN, P. B.
 Optical binocular scanning apparatus
 [NASA-CASE-NFO-11002] c14 N72-22441
CHAMBERS, A. B.
 Temperature controller for a fluid cooled garment
 [NASA-CASE-ABC-10599-1] c05 N73-26071
 A walking boot assembly
 [NASA-CASE-ABC-11101-1] c54 N77-14742
CHAMIS, C. C.
 Hybrid composite laminate structures
 [NASA-CASE-IFW-12118-1] c24 N77-27188
CHAMPIRE, R. A.
 Turbulence intensity indicator
 [NASA-CASE-LAR-11833-1] c06 N76-31229
 Crosswind landing gear position indicator
 [NASA-CASE-LAR-11941-1] c06 N77-20098
CHANDLER, J. A.
 Discrete local altitude sensing device Patent
 [NASA-CASE-XMS-03792] c14 N70-41812
 Line cutter Patent
 [NASA-CASE-XMS-04072] c15 N76-42017
 Spacecraft radiator cover Patent
 [NASA-CASE-MSC-12049] c31 N71-16080
 Winch having cable position and load indicators
 Patent
 [NASA-CASE-MSC-12052-1] c15 N71-24599
CHANDLER, W. A.
 Cryogenic storage system Patent
 [NASA-CASE-XMS-04390] c31 N70-41871
CHAO, J. I. L.
 Locking mechanism for orthopedic braces
 [NASA-CASE-GSC-12082-2] c52 N77-27694

CHAPMAN, C. P.
 Switching circuit Patent
 [NASA-CASE-INE-06505] c10 N71-24799
 Peak acceleration limiter for vibrational tester
 Patent
 [NASA-CASE-NFO-10556] c14 N71-27185
 Apparatus for recovering matter adhered to a
 host surface
 [NASA-CASE-NFC-11213] c15 N73-20514
 Automated attendance accounting system
 [NASA-CASE-NFO-11456] c08 N73-26176
 Servo-controlled intravital microscope system
 [NASA-CASE-NFC-13214-1] c35 N75-25123
CHAPMAN, R. H.
 Inflation system for balloon type satellites
 Patent
 [NASA-CASE-IGS-03351] c31 N71-16081
CHAPPELLE, E. W.
 Use of the enzyme hexokinase for the reduction
 of inherent light levels
 [NASA-CASE-IGS-05533] c04 N69-27487
 Light detection instrument Patent
 [NASA-CASE-XCS-05534] c23 N71-16355
 Lyophilized reaction mixtures Patent
 [NASA-CASE-IGS-05532] c06 N71-17705
 Flavin coenzyme assay
 [NASA-CASE-GSC-10565-1] c06 N72-25149
 Method of detecting and counting bacteria in
 body fluids
 [NASA-CASE-GSC-11092-2] c04 N73-27052
 Protein sterilization method of firefly
 luciferase using reduced pressure and
 molecular sieves
 [NASA-CASE-GSC-10225-1] c06 N73-27086
 Automatic instrument for chemical processing to
 detect microorganism in biological samples by
 measuring light reactions
 [NASA-CASE-GSC-11169-2] c05 N73-32011
 Method of detecting and counting bacteria
 [NASA-CASE-GSC-11917-2] c51 N76-29891
 Detection of microbial infection in blood and
 antibiotic determinations
 [NASA-CASE-GSC-12045-1] c52 N77-18733
 Application of luciferase assay for ATP to
 antimicrobial drug susceptibility
 [NASA-CASE-GSC-12039-1] c51 N77-22794
 Determination of antimicrobial susceptibilities
 of infected viruses without isolation
 [NASA-CASE-GSC-12046-1] c52 N77-26797
CHARLTON, E. W.
 Pneumatic system for controlling and actuating
 pneumatic cyclic devices
 [NASA-CASE-XNS-04843] c03 N69-21469
CHARNOVSKY, A. J.
 Tool attachment for spreading loose elements
 away from work Patent
 [NASA-CASE-XNF-02107] c15 N71-10809
CHASE, W. D.
 Full color hybrid display for aircraft simulators
 [NASA-CASE-ABC-10903-1] c09 N76-10148
 Vehicle simulator binocular multiplanar visual
 display system
 [NASA-CASE-ABC-10808-1] c09 N76-24280
 Spectrally balanced chromatic landing approach
 lighting system
 [NASA-CASE-ABC-10990-1] c04 N77-12031
CHATTERJEE, J. S.
 Dielectric loaded aperture antenna
 [NASA-CASE-LAR-11084-1] c09 N73-12216
CHEATHAM, E. C.
 Spacecraft docking and alignment system
 [NASA-CASE-HSC-12559-1] c18 N76-14186
CHEN, C. J.
 Double discharge metal vapor laser with metal
 halide as a lasant
 [NASA-CASE-NFO-13448-2] c36 N77-24469
 Isotope separation using metallic vapor lasers
 [NASA-CASE-NFO-13550-1] c36 N77-26477
CHEN, W.
 Arterial pulse wave pressure transducer
 [NASA-CASE-GSC-11531-1] c52 N74-27566
CHEN, W. S.
 Wind tunnel microphone structure Patent
 [NASA-CASE-XNF-00250] c11 N71-28779
CHENG, D. Y.
 Reversed cowli flap inlet thrust augmentor
 [NASA-CASE-ABC-10754-1] c07 N75-24736
 Noise suppressor for turbo fan jet engines
 [NASA-CASE-ABC-10812-1] c07 N76-18131
 System for measuring Reynolds in a turbulently
 flowing fluid
 [NASA-CASE-ABC-10755-2] c34 N76-27517
 System for measuring three fluctuating velocity
 components in a turbulently flowing fluid
 [NASA-CASE-ABC-10974-1] c34 N77-27345
CHEUNG, S. I.
 Pyrolysis system and process
 [NASA-CASE-HSC-12669-1] c44 N76-16621
CHEERDAK, A. S.
 Maximum power point tracker Patent
 [NASA-CASE-GSC-10376-1] c14 N71-27407
CHEERNOPF, R. C.
 Phase conjugation method and apparatus for an
 active retrodirective antenna array
 [NASA-CASE-NFO-13641-1] c32 N77-24340
CHESTNUTT, D.
 Variably positioned guide vanes for aerodynamic
 choking
 [NASA-CASE-LAR-10642-1] c07 N74-31270
CHI, K.
 High pulse rate high resolution optical radar
 system
 [NASA-CASE-NFO-11426] c07 N73-26119
CHIAO, B. Y.
 Optical frequency waveguide Patent
 [NASA-CASE-HQN-10541-1] c07 N71-26291
 Optical frequency waveguide and transmission
 system
 [NASA-CASE-HQN-10541-3] c23 N72-23695
CHILDRESS, J. D.
 Process for the preparation of brushite crystals
 [NASA-CASE-HRC-10338] c04 N72-33072
CHILDS, J. H.
 High-vacuum condenser tank for ion rocket tests
 Patent
 [NASA-CASE-XLE-00168] c11 N70-33278
 Electric propulsion engine test chamber Patent
 [NASA-CASE-XLE-00252] c11 N70-34844
CHILENSKI, J. J.
 Ignition system for monopropellant combustion
 devices Patent
 [NASA-CASE-XNF-00249] c28 N70-38249
CHILTON, E. G.
 Space capsule Patent
 [NASA-CASE-XIA-00149] c31 N70-37538
 Space capsule Patent
 [NASA-CASE-XIA-01332] c31 N71-15664
CHIOA, B. Y.
 Laser machining apparatus Patent
 [NASA-CASE-HQN-10541-2] c15 N71-27135
 Optical frequency waveguide and transmission
 system Patent
 [NASA-CASE-HQN-10541-4] c16 N71-27183
CHISEL, D. H.
 Fluidic proportional thruster system
 [NASA-CASE-ABC-10106-1] c28 N72-22769
CHONG, C. F.
 Flipflop interrogator and bi-polar current
 driver Patent
 [NASA-CASE-IGS-03058] c10 N71-19547
CHOW, B. Y.
 Elastic universal joint Patent
 [NASA-CASE-INE-00416] c15 N70-36947
CHOWNING, D.
 Emergency earth orbital escape device
 [NASA-CASE-HSC-13281] c31 N72-18859
CHREITZBERG, A. H.
 Electric battery and method for operating same
 Patent
 [NASA-CASE-IGS-01674] c03 N71-29129
CHRISTIAN, L. H.
 Resuscitation apparatus Patent
 [NASA-CASE-XNS-01115] c05 N70-39922
CHRISTOPHER, P. A.
 Method of fabricating an object with a thin wall
 having a precisely shaped slit
 [NASA-CASE-LAR-10409-1] c31 N74-21059
CHU, T. L.
 Growth of gallium nitride crystals
 [NASA-CASE-LAR-11302-1] c25 N75-13054
 Improved low cost substrates for polycrystalline
 solar cells
 [NASA-CASE-GSC-12022-2] c44 N76-26695
 Fabrication of polycrystalline solar cells on
 low-cost substrates
 [NASA-CASE-GSC-12022-1] c44 N76-28635
CHUMLEY, J. P.
 Zero gravity apparatus Patent

[NASA-CASE-IMP-06515] c14 N71-23227
CISEPLUCH, C. C.
 Apparatus for igniting solid propellants Patent
 [NASA-CASE-IXE-00207] c28 N70-33375
 Method of igniting solid propellants Patent
 [NASA-CASE-IXE-01988] c27 N71-15634
CISSEL, B. L.
 Threadless fastener apparatus Patent
 [NASA-CASE-IXE-05302] c15 N71-23254
CISEN, T. F.
 Production of crystals from molten solutions
 [NASA-CASE-NFO-13969-2] c76 N77-30984
CLAPP, W. B.
 Increasing efficiency of switching type
 regulator circuits Patent
 [NASA-CASE-IXS-09352] c09 N71-23316
CLARK, F. L.
 Hypersonic test facility Patent
 [NASA-CASE-IXA-00378] c11 N71-15925
 Hypersonic test facility Patent
 [NASA-CASE-IXA-05378] c11 N71-21475
CLARK, R. K.
 Thermal pump-compressor for space use Patent
 [NASA-CASE-IXA-00377] c33 N71-17610
CLARK, J. B.
 Automated fluid chemical analyzer Patent
 [NASA-CASE-IXP-09451] c06 N71-26754
CLARK, R. H.
 Apparatus for assembling space structure
 [NASA-CASE-MFS-23579-1] c12 N77-31213
CLARK, R. L.
 Deposition apparatus
 [NASA-CASE-LAB-10541-1] c15 N72-32487
CLARK, R. T.
 Horn feed having overlapping apertures Patent
 [NASA-CASE-GSC-10452] c07 N71-12396
CLARKE, D. B.
 Thermal compression bonding of interconnectors
 [NASA-CASE-GSC-10302] c15 N72-22487
CLATIERBUCK, C. B.
 Spacecraft battery seals
 [NASA-CASE-IGS-03864] c15 N69-24320
 Process for making RF shielded cable connector
 assemblies and the products formed thereby
 [NASA-CASE-GSC-11215-1] c09 N73-28083
 Microscope multi-angle, reflection, viewing
 adaptor and photographic recording system
 [NASA-CASE-GSC-11690-1] c14 N73-28499
CLAUSS, R. C.
 Transmission line thermal short Patent
 [NASA-CASE-IMP-09775] c09 N71-20445
 Circulator having quarter wavelength resonant
 post and parametric amplifier circuits
 utilizing the same Patent
 [NASA-CASE-IMP-02140] c09 N71-23097
 High-gain, broadband traveling wave maser Patent
 [NASA-CASE-NFO-10548] c16 N71-24831
 Maser for frequencies in the 7-20 GHz range
 [NASA-CASE-NFO-11437] c16 N72-28521
 Refrigerated coaxial coupling
 [NASA-CASE-NFO-13504-1] c33 N75-30430
 Reflected-wave maser
 [NASA-CASE-NFO-13490-1] c36 N76-31512
CLAWSON, G. I.
 Method and apparatus for checking fire detectors
 [NASA-CASE-GSC-11600-1] c35 N74-21019
CLAY, F. P., JR.
 Ionization vacuum gauge with all but the end of
 the ion collector shielded Patent
 [NASA-CASE-IXA-07424] c14 N71-18482
CLEHNS, G. W., JR.
 Deep space monitor communication satellite
 system Patent
 [NASA-CASE-IXC-06029-1] c31 N71-24813
CLEHNS, P. W.
 Device for configuring multiple leads
 [NASA-CASE-MFS-22133-1] c33 N74-26977
CLEMENT, W. G.
 Friction measuring apparatus Patent
 [NASA-CASE-IMP-08680] c14 N71-22995
CLEMENTS, P. A.
 System for stabilizing cable phase delay
 utilizing a coaxial cable under pressure
 [NASA-CASE-NFO-13138-1] c33 N74-17927
CLENNONS, D. I., JR.
 Thermal control of space vehicles Patent
 [NASA-CASE-IXA-01291] c33 N70-36617
CLEVELAND, G. J.
 Medical subject monitoring systems

[NASA-CASE-MSC-14180-1] c52 N76-14757
CLICKNER, R. E., JR.
 Umbilical disconnect Patent
 [NASA-CASE-IXA-00711] c03 N71-12258
CLIFF, R. A.
 Data processor having multiple sections
 activated at different times by selective
 power coupling to the sections Patent
 [NASA-CASE-IGS-04767] c08 N71-12494
 Ripple add and ripple subtract binary counters
 Patent
 [NASA-CASE-IGS-04766] c08 N71-18602
 Apparatus for computing square roots Patent
 [NASA-CASE-IGS-04768] c08 N71-19437
 Digitally controlled frequency synthesizer Patent
 [NASA-CASE-IGS-02317] c09 N71-23525
 SCR lamp driver
 [NASA-CASE-GSC-10221-1] c09 N72-23171
 Digital phase-locked loop
 [NASA-CASE-GSC-11623-1] c33 N75-25040
CLIFF, W. C.
 Wind measurement system
 [NASA-CASE-MFS-23362-1] c47 N77-10753
CLINE, R. W.
 Method and apparatus for optically monitoring
 the angular position of a rotating mirror
 [NASA-CASE-GSC-11353-1] c74 N74-21304
CLOTHER, W. H.
 Apparatus for the determination of the existence
 or non-existence of a bonding between two
 members Patent
 [NASA-CASE-MFS-13686] c15 N71-18132
 Device for measuring the ferrite content in an
 austenitic stainless-steel weld
 [NASA-CASE-MFS-22907-1] c26 N76-18257
 Method for measuring biaxial stress in a body
 subjected to stress inducing loads
 [NASA-CASE-MFS-23299-1] c39 N77-28511
CLOUGH, L. G.
 Driving lamps by induction
 [NASA-CASE-MFS-21214-1] c09 N73-30181
COBIN, J. C.
 Latching mechanism Patent
 [NASA-CASE-MSC-15474-1] c15 N71-26162
COCCA, F. J.
 Method and apparatus for detecting surface ions
 on silicon diodes and transistors
 [NASA-CASE-ERC-10325] c15 N72-25457
COE, B. H.
 High speed rolling element bearing
 [NASA-CASE-LEW-10856-1] c15 N72-22490
COE, P. L., JR.
 Supersonic transport
 [NASA-CASE-LAB-11932-1] c05 N76-31219
COFFINBERY, G. A.
 Oil cooling system for a gas turbine engine
 [NASA-CASE-LEW-12830-1] c07 N77-23106
COHEN, D.
 Fluid sample collector Patent
 [NASA-CASE-IXS-06767-1] c14 N71-20435
COHEN, R. A.
 Audio frequency marker system
 [NASA-CASE-NFO-11147] c14 N72-27408
COHEN, M. F.
 Digital modulator and demodulator Patent
 [NASA-CASE-FRC-10041] c08 N71-29138
COHEN, M. S.
 Nitramine propellants
 [NASA-CASE-NFO-14103-1] c28 N77-25346
COHEN, R. A.
 A method for selective gold diffusion of
 monolithic silicon devices and/or circuits
 Patent application
 [NASA-CASE-EEC-10072] c09 N70-11148
 Method and apparatus for stable silicon dioxide
 layers on silicon grown in silicon nitride
 ambient
 [NASA-CASE-ERC-10073-1] c24 N74-19769
COHN, B. H.
 Rechargeable battery which combats shape change
 of the zinc anode
 [NASA-CASE-BQR-10862-1] c44 N76-29699
COHN, R. B.
 Acoustical transducer calibrating system and
 apparatus
 [NASA-CASE-FRC-10060-1] c14 N71-27379
COKER, L. R.
 Quick disconnect latch and handle combination
 Patent

[NASA-CASE-MFS-11132] c15 N71-17649
COLBUEN, R. E.
 Automatic instrument for chemical processing to detect microorganism in biological samples by measuring light reactions
 [NASA-CASE-GSC-11169-2] c05 N73-32011

COLE, B. A., JR.
 Method and apparatus for measuring the damping characteristics of a structure
 [NASA-CASE-ARC-10154-1] c14 N72-22440

COLE, P. I.
 Low friction magnetic recording tape Patent
 [NASA-CASE-XGS-00373] c23 N71-15978
 System for recording and reproducing pulse code modulated data Patent
 [NASA-CASE-IGS-01021] c08 N71-21042
 Friction measuring apparatus Patent
 [NASA-CASE-INP-08680] c14 N71-22995
 Helical recorder arrangement for multiple channel recording on both sides of the tape
 [NASA-CASE-GSC-10614-1] c09 N72-11224

COLES, W. D.
 Twisted multifilament superconductor
 [NASA-CASE-LEW-11726-1] c26 N73-26752
 Method of fabricating a twisted composite superconductor
 [NASA-CASE-LEW-11015] c26 N73-32571

COLLIER, L.
 Garments for controlling the temperature of the body Patent
 [NASA-CASE-IMS-10269] c05 N71-24147

COLLIN, R. E.
 Apparatus and method for skin packaging articles
 [NASA-CASE-MFS-20655] c15 N73-27405

COLLINS, D. D.
 Process for removing sulfur dioxide from gas streams
 [NASA-CASE-MSC-16299-1] c45 N77-31668

COLLINS, D. P., JR.
 Fluid power transmitting gas bearing Patent
 [NASA-CASE-ERC-10097] c15 N71-28465

COLLINS, R. B.
 Automated multi-level vehicle parking system
 [NASA-CASE-WFO-13058-1] c37 N77-22480

COLLINS, R. E., JR.
 Impact energy absorbing system utilizing fracturable material
 [NASA-CASE-WFO-10671] c15 N72-20443

COLLINS, V. G.
 Recovery of potable water from human wastes in below-G conditions Patent
 [NASA-CASE-XIA-03213] c05 N71-11207

COLLINS, W. A.
 Flight control system
 [NASA-CASE-MSC-13397-1] c21 N72-25595

COLONY, J. A.
 Phototropic composition of matter
 [NASA-CASE-IGS-03736] c14 N72-22443

CONANT, J. E.
 Television simulation for aircraft and space flight Patent
 [NASA-CASE-IFR-03107] c09 N71-19449

COKE, C. D., JR.
 Minimum induced drag airfoil body Patent
 [NASA-CASE-XIA-00755] c01 N71-13410
 Minimum induced drag airfoil body Patent
 [NASA-CASE-XIA-05828] c01 N71-13411
 Absolute focus lock for microscopes
 [NASA-CASE-LAR-10184] c14 N72-22445
 Process for control of cell division
 [NASA-CASE-LAR-10772-3] c51 N77-25769

CONGER, C. C.
 Inductance device with vacuum insulation
 [NASA-CASE-LEW-10330-1] c09 N72-27226

CONIGLIO, G. V.
 Petzval type objective including field shaping lens Patent
 [NASA-CASE-GSC-10700] c23 N71-30027

COHN, J. E.
 Mount of inertia test fixture Patent
 [NASA-CASE-IGS-01023] c14 N71-22992

CONNELL, R. W.
 Flexible joint for pressurizable garment
 [NASA-CASE-MSC-11072] c54 N74-32546

CONNOLLY, D. J.
 Traveling wave tube circuit
 [NASA-CASE-LEW-12013-1] c33 N77-17360

CONNOLLY, J. P.
 Automatic real-time pair-feeding system for animals
 [NASA-CASE-ARC-10302-1] c51 N74-15778

CONNOORS, J. P.
 Annular rocket motor and nozzle configuration Patent
 [NASA-CASE-XLE-00078] c28 N70-33284
 Annular supersonic decelerator or drogue Patent
 [NASA-CASE-XLE-00222] c02 N70-37939
 Penshape exhaust nozzle for supersonic engine Patent
 [NASA-CASE-XLE-00057] c28 N70-38711
 Telescoping-spike supersonic inlet for aircraft engines Patent
 [NASA-CASE-XLE-00005] c28 N70-39899
 Thrust and direction control apparatus Patent
 [NASA-CASE-XLE-03583] c31 N71-17629

CONRAD, R. W.
 Thrust vector control apparatus Patent
 [NASA-CASE-XLE-00208] c28 N70-34294
 Non-reusable kinetic energy absorber Patent
 [NASA-CASE-XLE-00810] c15 N70-34861

CONRAD, W. E.
 Frequency modulation demodulator threshold extension device Patent
 [NASA-CASE-MSC-12165-1] c07 N71-33696

CONWAY, R. J.
 Method for detecting pollutants
 [NASA-CASE-LAR-11405-1] c45 N76-31714

COOGAN, J. M.
 Method of planetary atmospheric investigation using a split-trajectory dual flyby mode Patent
 [NASA-CASE-XAC-08494] c30 N71-15990

COOK, T. A.
 Metering gun for dispensing precisely measured charges of fluid
 [NASA-CASE-MFS-21163-1] c54 N74-17853

COOK, W. E., JR.
 Detector panels-micrometeoroid impact Patent
 [NASA-CASE-XIA-05906] c31 N71-16221

COOLIDGE, J. E.
 Data transfer system Patent
 [NASA-CASE-WFO-12107] c08 N71-27255

COON, G. W.
 Vibrating element electrometer with output signal magnified over input signal by a function of the mechanical Q of the vibrating element Patent
 [NASA-CASE-XAC-02807] c09 N71-23021
 Thermally cycled magnetometer Patent
 [NASA-CASE-XAC-03740] c14 N71-26135
 Trielectrode capacitive pressure transducer
 [NASA-CASE-ARC-10711-2] c33 N76-21390

COOPER, C. E.
 Underwater space suit pressure control regulator
 [NASA-CASE-MFS-20332] c05 N72-20097
 Underwater space suit pressure control regulator
 [NASA-CASE-MFS-20332-2] c05 N73-25125

COOPER, D. W.
 Generator for a space power system Patent
 [NASA-CASE-XLE-04250] c09 N71-20446
 Method of forming metal hydride films
 [NASA-CASE-LEW-12083-1] c26 N76-18262

COOPER, W. E.
 Collapsible Apollo couch
 [NASA-CASE-MSC-13140] c05 N72-11085

COPPELAND, J. T., JR.
 High speed photo-optical time recording
 [NASA-CASE-KSC-10294] c14 N72-18411

CORBIN, P. L.
 Automatic fatigue test temperature programmer Patent
 [NASA-CASE-XLA-02059] c33 N71-24276

CORNILLE, R. J., JR.
 Stretch de-spin mechanism Patent
 [NASA-CASE-XGS-00619] c30 N70-40016

CORNISH, S. D.
 Flame detector operable in presence of proton radiation
 [NASA-CASE-MFS-21577-1] c19 N74-29410

CONSON, R. W., JR.
 Nozzle Patent
 [NASA-CASE-XLA-00154] c28 N70-33374
 Cascade plug nozzle
 [NASA-CASE-LAR-10951-1] c28 N73-19819
 Cascade plug nozzle
 [NASA-CASE-LAR-11674-1] c07 N76-18117

CORWIN, R. E.
 Apparatus for determining thermophysical properties of test specimens

[NASA-CASE-LAR-11883-1] c09 N77-27131
COSTAKOS, N. C.
 Deployable flexible tunnel
 [NASA-CASE-MFS-22636-1] c37 N76-22540
COSTEN, R. C.
 Smokestack mounted airfoil
 [NASA-CASE-LAR-11669-1] c34 N76-13419
 Vortex generator for controlling the dispersion
 of effluents in a flowing liquid
 [NASA-CASE-LAR-12045-1] c34 N77-24423
COSTES, N. C.
 Self-recording portable scintillometer
 [NASA-CASE-MFS-20774] c14 N73-19420
COSTON, R. M.
 Dual solid cryogenics for spacecraft refrigeration
 Patent
 [NASA-CASE-GSC-10188-1] c23 N71-24725
COTE, C. E.
 Display for binary characters Patent
 [NASA-CASE-XGS-04987] c08 N71-20571
COUCE, R. B.
 Apparatus for aiding a pilot in avoiding a
 midair collision between aircraft
 [NASA-CASE-LAR-10717-1] c21 N73-30641
 Phase modulating with odd and even finite power
 series of a modulating signal
 [NASA-CASE-LAR-11607-1] c32 N77-14292
COULBERT, C. E.
 Multislot film cooled pyrolytic graphite rocket
 nozzle Patent
 [NASA-CASE-INP-04389] c28 N71-20942
COUVILLON, L. A., JR.
 Signal-to-noise ratio estimating by taking ratio
 of mean and standard deviation of integrated
 signal samples Patent
 [NASA-CASE-INP-05254] c07 N71-20791
 Method and apparatus for frequency-division
 multiplex communications by digital phase
 shift of carrier
 [NASA-CASE-NPO-11338] c08 N72-25208
 Apparatus for deriving synchronizing pulses from
 pulses in a single channel PCM communications
 system
 [NASA-CASE-NFO-11302-1] c07 N73-13149
 Pseudonoise (PN) synchronization of data system
 with derivation of clock frequency from
 received signal for clocking receiver PN
 generator
 [NASA-CASE-INP-03623] c09 N73-28084
 Method and apparatus for a single channel
 digital communications system
 [NASA-CASE-NFO-11302-2] c32 N74-10132
COWAN, J. J.
 Holography utilizing surface plasmon resonances
 [NASA-CASE-MFS-22040-1] c35 N74-26946
COWELL, T. E.
 Aerodynamic spike nozzle Patent
 [NASA-CASE-XGS-01143] c31 N71-15647
COY, J. A.
 Analog-to-digital converter
 [NASA-CASE-MSC-13110-1] c08 N72-22163
CRABILL, M. L.
 Control system for rocket vehicles Patent
 [NASA-CASE-XLA-01163] c21 N71-15582
CRAIG, R. A.
 Reduction of nitric oxide emissions from a
 combustor
 [NASA-CASE-ARC-10814-2] c25 N77-31260
CRAWFORD, B.
 Solar energy powered heliostats
 [NASA-CASE-GSC-10945-1] c21 N72-31637
CRAWFORD, W. E.
 Drive circuit for minimizing power consumption
 in inductive load Patent
 [NASA-CASE-NPO-10716] c09 N71-24892
CREASY, W. K.
 Shock absorber Patent
 [NASA-CASE-XMS-03722] c15 N71-21530
CREE, D.
 Amplifier drift tester
 [NASA-CASE-XMS-05562-1] c09 N69-39986
CREE, R. F.
 Catalyst for growth of boron carbide single
 crystal whiskers
 [NASA-CASE-REQ-03903] c15 N69-21922
CREEDON, J. F.
 Weld-bonded titanium structures
 [NASA-CASE-LAR-11549-1] c37 N77-11397
CREEL, T. B., JR.
 Apparatus for determining thermophysical
 properties of test specimens
 [NASA-CASE-LAR-11883-1] c09 N77-27131
CREPEAU, P. C.
 Flexible, repairable, portable material for
 electrical connectors Patent
 [NASA-CASE-XGS-05180] c18 N71-25881
CRESS, S. B.
 Coaxial inverted geometry transistor having
 buried emitter
 [NASA-CASE-ABC-10330-1] c09 N73-32112
CRESSLEY, J. B.
 Display for binary characters Patent
 [NASA-CASE-IGS-04987] c08 N71-20571
CREWS, J. H., JR.
 Strain coupled servo control system Patent
 [NASA-CASE-XLA-08530] c32 N71-25360
CRIBB, H. E.
 Parasitic probe antenna Patent
 [NASA-CASE-XKS-09348] c09 N71-13521
 Weatherproof helix antenna Patent
 [NASA-CASE-XKS-08485] c07 N71-19493
 VHF/UHF parasitic probe antenna Patent
 [NASA-CASE-XKS-09340] c07 N71-24614
 Validation device for spacecraft checkout
 equipment Patent
 [NASA-CASE-XKS-10543] c07 N71-26292
 Protective suit having an audio transceiver Patent
 [NASA-CASE-RSC-10164] c07 N71-33108
 Collapsible high gain antenna
 [NASA-CASE-RSC-10392] c07 N73-26117
CROFT, R. E.
 Personal propulsion unit Patent
 [NASA-CASE-MFS-20130] c28 N71-27585
CROFTS, D. E.
 Heat flux sensor assembly
 [NASA-CASE-XMS-05909-1] c14 N69-27459
CROON, D. E.
 Vortex attenuation method
 [NASA-CASE-LAR-12034-1] c02 N77-22045
CROWELL, W. F.
 Omnidirectional microwave spacecraft antenna
 Patent
 [NASA-CASE-XLA-03114] c09 N71-22888
 Stacked array of omnidirectional antennas
 [NASA-CASE-LAR-10545-1] c09 N72-21244
 Dielectric loaded aperture antenna
 [NASA-CASE-LAR-11084-1] c09 N73-12216
CROUCH, H. W.
 Shrink-fit gas valve Patent
 [NASA-CASE-XGS-00587] c15 N70-35087
CROUCH, R. K.
 Vapor phase growth of groups 3-5 compounds by
 hydrogen chloride transport of the elements
 [NASA-CASE-LAR-11144-1] c25 N75-26043
CROW, R. B.
 Wide band doubler and sine wave quadrature
 generator
 [NASA-CASE-NFO-11133] c10 N72-20223
 Filter for third order phase locked loops
 [NASA-CASE-NFO-11941-1] c10 N73-27171
 Frequency discriminator and phase detector circuit
 [NASA-CASE-NFO-11515-1] c33 N77-13315
CRON, G. W.
 Foot pedal operated fluid type exercising device
 [NASA-CASE-MSC-11561-1] c05 N73-32014
CRUMPLER, J. F.
 Vacuum pressure molding technique
 [NASA-CASE-LAR-10073-1] c37 N76-24575
CRUMPLER, W. B.
 All-directional fastener Patent
 [NASA-CASE-XLA-01807] c15 N71-10799
 Multilegged support system Patent
 [NASA-CASE-XLA-01326] c11 N71-21481
CRUTCHER, J. E.
 Isolation coupling arrangement for a torque
 measuring system
 [NASA-CASE-XLA-04897] c15 N72-22482
COBBISON, R. W.
 Thrust and direction control apparatus Patent
 [NASA-CASE-XLB-03583] c31 N71-17629
CUBLEY, H. D.
 Antenna array phase quadrature tracking system
 Patent
 [NASA-CASE-MSC-12205-1] c07 N71-27056
CUDDIHY, E. F.
 Method of making hollow elastomeric bodies
 [NASA-CASE-NFO-13535-1] c37 N76-31524

CUDHOPE, F. B.
Magnetic tape head function switching system
[NASA-CASE-GSC-11956-1] c35 N75-25134

CULLEB, V. B.
Myocardium wall thickness transducer and measuring method
[NASA-CASE-NFO-13644-1] c52 N76-29895
Catheter tip force transducer for cardiovascular research
[NASA-CASE-NFO-13643-1] c52 N76-29896

CULP, D. B.
Liquid metal slip ring
[NASA-CASE-LFW-12277-1] c33 N76-28472
Process for preparing liquid metal electrical contact device
[NASA-CASE-LFW-11978-1] c33 N77-26385

CUMMINGHAM, B. B.
Potable water dispenser
[NASA-CASE-NFS-21115-1] c54 N74-12779

CUMMINGHAM, B. B.
Hydrostatic bearing support
[NASA-CASE-LFW-11158-1] c37 N77-28486

CURRIE, J. B.
Bi-carrier demodulator with modulation Patent
[NASA-CASE-IMP-01160] c07 N71-11298
Transistor servo system including a unique differential amplifier circuit Patent
[NASA-CASE-IMP-05195] c10 N71-24861
Pulse width inverter Patent
[NASA-CASE-NFS-10068] c10 N71-25139
Ratemeter
[NASA-CASE-NFS-20418] c14 N73-24473
Induction motor control system with voltage controlled oscillator circuit
[NASA-CASE-NFS-21465-1] c10 N73-32145

CURRIE, B. B., JR.
Relay binary circuit Patent
[NASA-CASE-IMP-00421] c09 N70-34502

CURRY, J. E.
Method of producing alternating ether siloxane copolymers Patent
[NASA-CASE-IMP-02584] c06 N71-20905

CURRY, K. C.
Torsional disconnect unit
[NASA-CASE-NFO-10704] c15 N72-20445

CURRY, B. B.
Display research collision warning system
[NASA-CASE-NFN-10703] c21 N73-13643

CURTIS, D. L.
Life support system
[NASA-CASE-MSC-12411-1] c05 N72-20096

CYGANOWICZ, I. A.
System for and method of freezing biological tissue
[NASA-CASE-GSC-12173-1] c52 N77-27693

CZARCINSKI, E. A.
Programmable telemetry system Patent
[NASA-CASE-GSC-10131-1] c07 N71-24624

D

DARGIS, J. J.
Motor run-up system
[NASA-CASE-NFO-13374-1] c33 N75-19524

DAHN, W. B.
Clear air turbulence detector
[NASA-CASE-NFS-21244-1] c36 N75-15028
Focused laser Doppler velocimeter
[NASA-CASE-NFS-23178-1] c35 N77-10493
Wind measurement system
[NASA-CASE-NFS-23362-1] c47 N77-10753

DAILEY, J. J.
Multi-purpose wind tunnel reaction control model block
[NASA-CASE-MSC-19706-1] c09 N77-19077

DAILEY, C. C.
Microwave power receiving antenna Patent
[NASA-CASE-NFS-20333] c09 N71-13486
Method and means for testing a glancing-incidence mirror system
[NASA-CASE-NFS-22409-2] c74 N76-26988

DALL, W. J.
Method of fabricating an article with cavities
[NASA-CASE-LAR-10318-1] c31 N74-18089
Bonding method in the manufacture of continuous regression rate sensor devices
[NASA-CASE-LAR-10337-1] c24 N75-30260

DALLIO, G. F.
Synthesis of polymeric schiff bases by schiff-base exchange reactions Patent
[NASA-CASE-IMP-08651] c06 N71-11236
Direct synthesis of polymeric schiff bases from two amines and two aldehydes Patent
[NASA-CASE-IMP-08655] c06 N71-11239
Amine polymers and process for preparing the same Patent
[NASA-CASE-IMP-08656] c06 N71-11242
Synthesis of polymeric schiff bases by reaction of acetals and amine compounds Patent
[NASA-CASE-IMP-08652] c06 N71-11243
Aromatic diamine-aromatic dialdehyde high molecular weight schiff base polymers prepared in a monofunctional schiff base Patent
[NASA-CASE-IMP-03074] c06 N71-24740

DALL, W. B.
Fault tolerant clock apparatus utilizing a controlled minority of clock elements
[NASA-CASE-MSC-12531-1] c35 N75-30504

DANERSON, C. B.
Instrument for measuring potentials on two dimensional electric field plots Patent
[NASA-CASE-LIA-08493] c10 N71-19421

DANNIG, A. B., JR.
Capacitive tank gaging apparatus being independent of liquid distribution
[NASA-CASE-NFS-21629] c14 N72-22442

DANCHENKO, V.
Radiation hardening of MOS devices by boron
[NASA-CASE-GSC-11425-1] c76 N74-20329
Radiation hardening of MOS devices by boron
[NASA-CASE-GSC-11425-2] c76 N75-25730

DANE, D. B.
Harness assembly Patent
[NASA-CASE-NFS-14671] c05 N71-12341
Air cushion lift pad Patent
[NASA-CASE-NFS-14685] c31 N71-15689
Ratchet mechanism Patent
[NASA-CASE-NFS-12805] c15 N71-17805
Mechanical simulator of low gravity conditions Patent
[NASA-CASE-NFS-10555] c11 N71-19494
Mechanically actuated triggered hand
[NASA-CASE-NFS-20413] c15 N72-21463
Sprag solenoid brake
[NASA-CASE-NFS-21846-1] c37 N74-26976
Orthotic arm joint
[NASA-CASE-NFS-21611-1] c54 N75-12616
Remote manipulator system
[NASA-CASE-NFS-22022-1] c37 N76-15460

DANGLE, B. B.
Rocket engine Patent
[NASA-CASE-XLE-00342] c28 N70-37980

DANIELS, B. J.
Adaptive tracking notch filter system Patent
[NASA-CASE-IMP-01892] c10 N71-22986

DANSKIN, J. B.
Fuel injection pump for internal combustion engines Patent
[NASA-CASE-MSC-12139-1] c28 N71-14058

DARCEY, B. J.
Satellite communication system and method Patent
[NASA-CASE-GSC-10118-1] c07 N71-24621

DARR, J., JR.
Threadless fastener apparatus Patent
[NASA-CASE-IMP-05302] c15 N71-23254

DARROW, W. B., JR.
Collapsible nozzle extension for rocket engines Patent
[NASA-CASE-NFS-11497] c28 N71-16224

DASGUPTA, B.
Dual purpose optical instrument capable of simultaneously acting as spectrometer and diffractometer
[NASA-CASE-IMP-05231] c14 N73-28491

DAVID, B. B.
Insulated electrocardiographic electrodes
[NASA-CASE-MSC-14339-1] c05 N75-24716

DAVIDS, L. B.
Guidance and maneuver analyzer Patent
[NASA-CASE-IMP-09572] c14 N71-15621

DAVIDSON, A. C.
Spacecraft attitude sensor
[NASA-CASE-GSC-10890-1] c21 N73-30640

DAVIDSON, J. B.
Ripple indicator
[NASA-CASE-KSC-10162] c09 N72-11225

DAVIDSON, J. S. W.
Centrifuge mounted motion simulator Patent

[NASA-CASE-XPC-00399] c11 N70-34815
DAVIES, W. D. T.
 Correlation type phase detector
 [NASA-CASE-GSC-11744-1] c33 N75-26243

DAVIS, A. J.
 Fiber optic vibration transducer and analyzer
 Patent
 [NASA-CASE-XMF-02433] c14 N71-10616

DAVIS, B. K.
 Spectral method for monitoring atmospheric
 contamination of inert-gas welding shields
 Patent
 [NASA-CASE-XMF-02039] c15 N71-15871
 Stud-bonding gun
 [NASA-CASE-MFS-20299] c15 N72-11392
 Solar energy power system
 [NASA-CASE-MFS-21628-1] c44 N75-32581
 Solar energy power system
 [NASA-CASE-MFS-21628-2] c44 N76-23675

DAVIS, D. P.
 Quick disconnect coupling
 [NASA-CASE-NFO-11202] c15 N72-25450

DAVIS, E. J.
 Cable stabilizer for open shaft cable operated
 elevators
 [NASA-CASE-KSC-10513] c15 N72-25453

DAVIS, E. S.
 Anti-glare improvement for optical imaging
 systems Patent
 [NASA-CASE-NFO-10337] c14 N71-15604
 Radiant energy intensity measurement system Patent
 [NASA-CASE-XMF-06510] c14 N71-23797
 Reference voltage switching unit
 [NASA-CASE-NFO-11253] c09 N72-17157

DAVIS, J. G., JR.
 Tube fabricating process
 [NASA-CASE-LAR-10203-1] c15 N72-16330

DAVIS, J. P.
 Multiducted electromagnetic pump Patent
 [NASA-CASE-NFO-10755] c15 N71-27084
 Shell side liquid metal cooler
 [NASA-CASE-NFO-10831] c33 N72-20915
 Uninsulated in-core thermionic diode
 [NASA-CASE-NFO-10542] c09 N72-27228

DAVIS, J. W.
 Burst diaphragm flow initiator Patent
 [NASA-CASE-MFS-12915] c11 N71-17600
 Wind tunnel test section
 [NASA-CASE-MFS-20509] c11 N72-17183
 Altitude simulation chamber for rocket engine
 testing
 [NASA-CASE-MFS-20620] c11 N72-27262

DAVIS, L. P.
 Isolation coupling arrangement for a torque
 measuring system
 [NASA-CASE-XIA-04897] c15 N72-22482

DAVIS, W. S.
 Decomposition unit Patent
 [NASA-CASE-XNS-00583] c28 N70-38504

DAVIS, W. T.
 Strain coupled servo control system Patent
 [NASA-CASE-XIA-08530] c32 N71-25360

DAVISON, E. H.
 Meteoroid sensing apparatus having a coincidence
 network connected to a pair of capacitors
 Patent
 [NASA-CASE-XLE-01246] c14 N71-10797

DAVISON, E. W.
 Gaseous control system for nuclear reactors
 [NASA-CASE-XLE-04599] c22 N72-20597

DAWN, P. S.
 Burn rate testing apparatus
 [NASA-CASE-XNS-09690] c33 N72-25913
 Lightweight electrically powered flexible
 thermal laminate
 [NASA-CASE-MSC-12662-1] c24 N75-16635

DAY, J. L.
 Electrode for biological recording
 [NASA-CASE-XNS-02872] c05 N69-21925
 Pressed disc type sensing electrodes with ion-
 screening means Patent
 [NASA-CASE-XNS-04212-1] c05 N71-12346
 Method of making a perspiration resistant
 biopotential electrode
 [NASA-CASE-MSC-90153-2] c05 N72-25120

DAYAN, V. H.
 Hydrogen leak detection device Patent
 [NASA-CASE-MFS-11537] c14 N71-20442

DEBMAN, W. J.
 Magnetometer
 [NASA-CASE-IAR-11617-2] c35 N77-17430

DEBMAN, W. J., JR.
 Vapor phase growth of groups 3-5 compounds by
 hydrogen chloride transport of the elements
 [NASA-CASE-IAR-11144-1] c25 N75-26043

DEBOO, G. J.
 Gyrator type circuit Patent
 [NASA-CASE-IAC-10608-1] c09 N71-12517
 Feedback integrator with grounded capacitor Patent
 [NASA-CASE-IAC-10607] c10 N71-23669
 Precision rectifier with FET switching means
 Patent
 [NASA-CASE-ABC-10101-1] c09 N71-33109
 Phase shift circuit apparatus
 [NASA-CASE-ABC-10269-1] c10 N72-16172
 Temperature compensated light source using a
 light emitting diode
 [NASA-CASE-ABC-10467-1] c09 N73-14214
 Self-tuning bandpass filter
 [NASA-CASE-ABC-10264-1] c09 N73-20231

DECABLO, F. S.
 Failure detection and control means for improved
 drift performance of a gimballed platform system
 [NASA-CASE-MFS-23551-1] c04 N76-26175

DECKEN, A. J.
 High powered arc electrodes
 [NASA-CASE-LEW-11162-1] c33 N74-12913

DEDOLPH, R. D.
 Rotary plant growth accelerating apparatus
 [NASA-CASE-ABC-10722-1] c51 N75-25503

DEERKOSKI, L. P.
 Signal-to-noise ratio determination circuit
 [NASA-CASE-GSC-11239-1] c10 N73-25241
 Switchable beamwidth monopulse method and system
 [NASA-CASE-GSC-11924-1] c33 N76-27472
 Pseudo noise code and data transmission method
 and apparatus
 [NASA-CASE-GSC-12017-1] c32 N77-30308

DEFURIA, R. R.
 Fluid power transmitting gas bearing Patent
 [NASA-CASE-ERC-10097] c15 N71-28465

DEGREE, M. D.
 Traversing probe Patent
 [NASA-CASE-XFR-02007] c12 N71-24692

DEGRASSE, B. W.
 Folded traveling wave maser structure Patent
 [NASA-CASE-XMF-05219] c16 N71-15550

DEIS, B. C.
 Traveling sealer for contoured table Patent
 [NASA-CASE-XIA-01494] c15 N71-24164

DEL CASALE, L. A.
 Signal generator
 [NASA-CASE-XMF-05612] c09 N65-21468

DEL CURTO, B.
 System for monitoring the presence of neutrals
 in a stream of ions Patent
 [NASA-CASE-XMF-02592] c24 N71-20518

DEL DUCA, A.
 Electronic divider and multiplier using
 photocells Patent
 [NASA-CASE-XFR-05637] c09 N71-19480

DELANO, C. B.
 Polymeric foams from cross-linkable
 poly-N-arylenebenzimidazoles
 [NASA-CASE-ABC-11008-1] c27 N76-28421

DELAPLAIN, R. W.
 Rotary leveling base platform
 [NASA-CASE-ABC-10981-1] c35 N77-10498

DELAURE, L. A.
 Emergency earth orbital escape device
 [NASA-CASE-MSC-13281] c31 N72-18859

DELGREGO, D. J.
 Clear air turbulence detector
 [NASA-CASE-MFS-21244-1] c36 N75-15028

DELUCA, J. J.
 Segmented superconducting magnet for a broadband
 traveling wave maser Patent
 [NASA-CASE-XGS-10518] c16 N71-28554
 Bonding of sapphire to sapphire by eutectic
 mixture of aluminum oxide and zirconium oxide
 [NASA-CASE-GSC-11577-1] c37 N75-15992
 Bonding of sapphire to sapphire by eutectic
 mixture of aluminum oxide and zirconium oxide
 [NASA-CASE-GSC-11577-3] c24 N76-19234

DELVIGS, P.
 Preparation of polyimides from mixtures of
 monomeric diamines and esters of

polycarboxylic acids
[NASA-CASE-LRW-11325-1] c06 N73-27980

DEMING, J. W.
Detection of microbial infection in blood and
antibiotic determinations
[NASA-CASE-GSC-12045-1] c52 N77-18733

Determination of antimicrobial susceptibilities
of infected urines without isolation
[NASA-CASE-GSC-12046-1] c52 N77-26797

DEMOGHEES, C.
Low cycle fatigue testing machine
[NASA-CASE-LAR-10270-1] c32 N72-25877

DEMOHEST, K. E.
Self-lubricating gears and other mechanical
parts Patent
[NASA-CASE-MFS-14971] c15 N71-24984

DENACI, D. E.
Clamping assembly for inertial components Patent
[NASA-CASE-XMS-02184] c15 N71-20813

DEO, N.
Dual purpose momentum wheels for spacecraft with
magnetic recording
[NASA-CASE-NFO-11481] c21 N73-13644

DERING, V. G.
Vortex breech high pressure gas generator
[NASA-CASE-LAR-10549-1] c31 N73-13898

DERE, L. J.
Direct radiation cooling of the collector of
linear beam tubes
[NASA-CASE-XNP-09227] c15 N69-24319

Temperature-compensating means for cavity
resonator of amplifier Patent
[NASA-CASE-XNP-00449] c14 N70-35220

Electron beam tube containing a multiple cathode
array employing indexing means for cathode
substitution Patent
[NASA-CASE-NFO-10625] c09 N71-26182

Thermostatic actuator
[NASA-CASE-NFO-10637] c15 N72-12409

Thermal motor
[NASA-CASE-NFO-11283] c09 N72-25260

Electrostatically controlled heat shutter
[NASA-CASE-NFO-11942-1] c33 N73-32818

DESCAMP, V. A.
Filter regeneration systems
[NASA-CASE-HSC-14273-1] c34 N75-33342

DESTRESE, J. G.
Thermionic tantalum emitter doped with oxygen
Patent Application
[NASA-CASE-NFO-11138] c03 N70-34646

DETWEILER, B. K.
High isolation RF signal selection switches
[NASA-CASE-NFO-13081-1] c33 N74-22814

DEVINE, B. J.
Optical tracker having overlapping reticles on
parallel axes Patent
[NASA-CASE-XGS-05715] c23 N71-16100

DEWHIRST, D. L.
Deformable vehicle wheel Patent
[NASA-CASE-MFS-20400] c31 N71-18611

DEWITT, B. L.
Fluid coupling Patent
[NASA-CASE-XLE-00397] c15 N70-36492

DEYOUNG, R. J.
Volumetric direct nuclear pumped laser
[NASA-CASE-LAR-12183-1] c36 N77-21424

DI LOSA, V. J.
Diversity receiving system with diversity phase
lock Patent
[NASA-CASE-XGS-01222] c10 N71-20841

DIARCHID, D. D.
Stator rotor coils
[NASA-CASE-HSC-16000-1] c07 N77-13062

DIAMOND, R. E.
Central spar and module joint Patent
[NASA-CASE-XNP-02341] c15 N71-21531

DIBATTISTA, J. D.
Anti-meteoroid device
[NASA-CASE-LAR-10788-1] c31 N73-20880

Determining particle density using known
material Hugoniot curves
[NASA-CASE-LAR-11059-1] c76 N75-12810

Meteoroid impact position locator aid for manned
space station
[NASA-CASE-LAR-10629-1] c35 N75-33367

DICKENS, L. E.
Millimeter wave pumped parametric amplifier
[NASA-CASE-GSC-11617-1] c33 N74-32660

DICKERSON, G. E.
Composite lamination method
[NASA-CASE-LAR-12019-1] c24 N77-22179

DICKINSON, R. E.
RF beam center location method and apparatus for
power transmission system
[NASA-CASE-NFO-13821-1] c44 N76-26692

Thin conformal antenna array for microwave power
conversion
[NASA-CASE-NFO-13886-1] c32 N77-11269

DIETRICH, P. J.
Amplitude steered array
[NASA-CASE-GSC-11446-1] c33 N74-20860

DILLON, R. P., JR.
Shock absorbing mount for electrical components
[NASA-CASE-NFO-13253-1] c37 N75-18573

DIMOFF, J.
Cryogenic apparatus for measuring the intensity
of magnetic fields
[NASA-CASE-XAC-02407] c14 N65-27423

Apparatus for coupling a plurality of ungrounded
circuits to a grounded circuit Patent
[NASA-CASE-XAC-00086] c09 N70-33182

Two-plane balance Patent
[NASA-CASE-XAC-00073] c14 N70-34813

Differential pressure cell Patent
[NASA-CASE-XAC-00042] c14 N70-34816

High speed low level electrical stepping switch
Patent
[NASA-CASE-XAC-00060] c09 N70-39915

Dynamic sensor Patent
[NASA-CASE-XAC-02877] c14 N70-41681

Electrostatic charged particle analyzer having
deflection members shaped according to the
periodic voltage applied thereto Patent
[NASA-CASE-XAC-05506-1] c24 N71-16095

Inertial reference apparatus Patent
[NASA-CASE-XAC-03107] c23 N71-16098

Thermal detector of electromagnetic energy by
means of a vibrating electrode Patent
[NASA-CASE-XAC-10768] c09 N71-18830

Vibrating element electrometer with output
signal magnified over input signal by a
function of the mechanical Q of the vibrating
element Patent
[NASA-CASE-XAC-02807] c09 N71-23021

Wide range dynamic pressure sensor
[NASA-CASE-ARC-10263-1] c14 N72-22438

Nondispersive gas analyzing method and apparatus
wherein radiation is serially passed through a
reference and unknown gas
[NASA-CASE-ARC-10308-1] c06 N72-31141

Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-2(B)] c33 N74-14941

Chromato-fluorographic drug detector
[NASA-CASE-ARC-10633-1] c25 N74-26947

Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-3] c33 N75-19520

Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-2] c33 N75-25041

NDIR gas analyzer based on absorption modulation
ratios for known and unknown samples
[NASA-CASE-ARC-10802-1] c35 N75-30502

Modulated hydrogen ion flame detector
[NASA-CASE-ARC-10322-1] c35 N76-18403

Method and apparatus for compensating reflection
losses in a path length modulated
absorption-absorption trace gas detector
[NASA-CASE-ARC-10631-1] c74 N76-20958

Nulling device for detection of trace gases by
NDIR absorption
[NASA-CASE-ARC-10760-1] c25 N76-22323

Integrated structure vacuum tube
[NASA-CASE-ARC-10445-1] c31 N76-31365

Optically selective, acoustically resonant gas
detecting transducer
[NASA-CASE-ARC-10639-1] c35 N77-19388

DIX, H. G.
Demodulation system Patent
[NASA-CASE-XAC-04030] c10 N71-19472

DIXON, G. V.
Active vibration isolator for flexible bodies
Patent
[NASA-CASE-LAR-10106-1] c15 N71-27169

DOBBS, B. F.
Cyclically operable optical shutter
[NASA-CASE-NFO-10758] c14 N73-14427

DOD, L. E.
Plural beam antenna

[NASA-CASE-GSC-11013-1] c09 N73-19234
DOLAND, G. D.
 Method and apparatus for decoding compatible
 convolutional codes
 [NASA-CASE-MSC-14070-1] c32 N74-32598
 Phase array antenna control
 [NASA-CASE-MSC-14939-1] c33 N77-19320
DOMBROWSKI, E. G.
 Adjustable tension wire guide Patent
 [NASA-CASE-XMS-02383] c15 N71-15918
DONALDSON, R. W., JR.
 Gas chromatograph injection system
 [NASA-CASE-ARC-10344-1] c14 N72-21433
 Gas chromatograph injection system
 [NASA-CASE-ARC-10344-2] c35 N75-26334
DONNELLY, P. C.
 Prevention of pressure build-up in
 electrochemical cells Patent
 [NASA-CASE-XGS-01419] c03 N70-41864
DONNINI, J. E.
 Hydrogen fire blink detector
 [NASA-CASE-MIS-15063] c14 N72-25412
DONOHUE, J. E.
 Passive dual spin misalignment compensators
 [NASA-CASE-GSC-11479-1] c35 N74-28097
DONOVAN, B. P.
 Artificial gravity spin deployment system Patent
 [NASA-CASE-XNP-02595] c31 N71-21881
DONOVAN, G.
 Drying apparatus for photographic sheet material
 [NASA-CASE-GSC-11074-1] c14 N73-28489
DONOVAN, R. P.
 Particulate and aerosol detector
 [NASA-CASE-LAR-11434-1] c35 N76-22509
DOONG, H.
 Analog to digital converter Patent
 [NASA-CASE-XIA-00670] c08 N71-12501
 Controllable high voltage source having fast
 settling time
 [NASA-CASE-GSC-11844-1] c33 N75-19522
DORNE, A.
 Nose cone mounted heat resistant antenna Patent
 [NASA-CASE-XMS-04312] c07 N71-22984
DOTSON, W. P., JR.
 Digital to analog conversion apparatus
 [NASA-CASE-MSC-12458-1] c08 N73-32081
DOTTS, R. L.
 Thermal insulation protection means
 [NASA-CASE-MSC-12737-1] c34 N77-22423
DOUGHERTY, W. B.
 Rotary solenoid shutter drive assembly and
 rotary inertia damper and stop plate assembly
 [NASA-CASE-GSC-11560-1] c33 N74-20861
DOUGHERTY, R. A.
 Automatic signal range selector for metering
 devices Patent
 [NASA-CASE-XMS-06497] c14 N71-26244
DOUGLAS, J.
 Process of casting heavy slips Patent
 [NASA-CASE-XLB-00106] c15 N71-16076
DOUGLAS, J. L.
 Maximum power point tracker Patent
 [NASA-CASE-GSC-10376-1] c14 N71-27407
DOW, E. B.
 Vacuum pressure soldering technique
 [NASA-CASE-LAR-10073-1] c37 N76-24575
DOW, E. F.
 Two component bearing Patent
 [NASA-CASE-XLA-00013] c15 N71-29136
DOWLER, W. L.
 Solid propellant rocket motor nozzle
 [NASA-CASE-NFO-11458] c28 N72-23810
 Solid propellant rocket motor
 [NASA-CASE-NFO-11559] c28 N73-24784
DOWNS, W. E.
 Transpirationally cooled heat ablation system
 Patent
 [NASA-CASE-XMS-02677] c31 N70-42075
 Method for obtaining oxygen from lunar or
 similar soil
 [NASA-CASE-MSC-12408-1] c46 N74-13011
DOYLE, J. C.
 Measuring device Patent
 [NASA-CASE-XMS-01546] c14 N70-40233
DRESSFIELD, E. L.
 Cobalt-base alloy
 [NASA-CASE-LEW-10436-1] c17 N73-32415
DRESSIE, E. S.
 Multi-purpose wind tunnel reaction control model
 block
 [NASA-CASE-MSC-19706-1] c09 N77-19077
DREXHAGE, E. G.
 Injection head for delivering liquid fuel and
 oxidizers
 [NASA-CASE-NFO-10046] c28 N72-17843
DRISCOLL, K. L.
 Means for accommodating large overstrain in lead
 wires
 [NASA-CASE-LAR-10168-1] c33 N74-22865
DRUMMOND, A. S.
 Flexible back-up bar Patent
 [NASA-CASE-XNP-00722] c15 N70-40204
DU PONT, P. S.
 Solar panel fabrication Patent
 [NASA-CASE-XNP-03413] c03 N71-26726
DUBBY, M.
 Central spar and module joint Patent
 [NASA-CASE-XNP-02341] c15 N71-21531
DUBOIS, R. D.
 Guide for a typewriter
 [NASA-CASE-MIS-15218-1] c37 N77-19457
DUBUSKEE, W.
 Apparatus for welding sheet material
 [NASA-CASE-XMS-01330] c37 N75-27376
DUFFY, J. O.
 Minimal logic block encoder Patent
 [NASA-CASE-NFO-10595] c10 N71-25917
DUNABETZ, R. A.
 Flexible, repairable, portable material for
 electrical connectors Patent
 [NASA-CASE-XGS-05180] c18 N71-25881
DUNAVANT, J. C.
 Hot air balloon deceleration and recovery system
 Patent
 [NASA-CASE-XLA-06824-2] c02 N71-11037
DUNN, J. G.
 Satellite interlace synchronization system
 [NASA-CASE-GSC-10390-1] c07 N72-11149
DUNN, J. H.
 Foldable conduit Patent
 [NASA-CASE-XLB-00620] c32 N70-41579
DUNN, S. T.
 Ellipsoidal mirror reflectometer including means
 for averaging the radiation reflected from the
 sample Patent
 [NASA-CASE-XGS-05291] c23 N71-16341
DUNN, W. R.
 Coaxial inverted geometry transistor having
 buried emitter
 [NASA-CASE-ARC-10330-1] c09 N73-32112
DUNNAVANT, W. E.
 Process for preparation of dianilinosilanes Patent
 [NASA-CASE-XNP-06409] c06 N71-23230
 Process for preparation of high-molecular-
 weight polyaryloxysilanes Patent
 [NASA-CASE-XNP-08674] c06 N71-28807
DUNNING, J. W., JR.
 Slug flow magnetohydrodynamic generator
 [NASA-CASE-XLB-02083] c03 N69-39983
DUPRAW, W. A.
 Analytical test apparatus and method for
 determining oxide content of alkali metal Patent
 [NASA-CASE-XLB-01997] c06 N71-23527
DURAN, E. E.
 Subminiature insertable force transducer
 [NASA-CASE-NFO-13423-1] c33 N75-31329
 Miniature muscle displacement transducer
 [NASA-CASE-NFO-13519-1] c33 N76-19338
DURNEY, G. P.
 Space suit
 [NASA-CASE-MSC-12609-1] c05 N73-32012
DUSTIN, H. O.
 Pneumatic oscillator Patent
 [NASA-CASE-LEW-10345-1] c10 N71-25899
 Shock position sensor for supersonic
 inlets
 [NASA-CASE-LEW-11915-1] c35 N76-14431

E

EASLEY, W. C.
 Resonant waveguide stark cell
 [NASA-CASE-LAR-11352-1] c33 N75-26245
EASTERLING, E. F.
 Radar ranging receiver Patent
 [NASA-CASE-XNP-00748] c07 N70-36911
 Phase-locked loop with sideband rejecting
 properties Patent
 [NASA-CASE-XNP-02723] c07 N70-41680

Time synchronization system utilizing moon reflected coded signals Patent [NASA-CASE-NFO-10143] c10 N71-26326

Two carrier communication system with single transmitter [NASA-CASE-NFO-11546] cC7 N73-26118

EASTON, E. A. Data multiplexer using tree switching configuration [NASA-CASE-NFO-11333] c08 N72-22162

Flexible computer accessed telemetry [NASA-CASE-NFC-11358] cC7 N72-25172

EATON, L. E. Heat transfer device [NASA-CASE-NFS-22938-1] c34 N76-18374

EBERSOLE, I. J. Inverter ratio failure detector [NASA-CASE-NFO-13160-1] c35 N74-18090

EBIHARA, B. I. Thermal radiation shielding Patent [NASA-CASE-XIF-03432] c33 N71-24145

EBY, R. J. Thermal control system for a spacecraft modular housing [NASA-CASE-GSC-11018-1] c31 N73-30829

ECKERT, E. B. G. Transpiration cooled turbine blade manufactured from wires Patent [NASA-CASE-XIF-00020] c15 N70-33226

ECKLES, P. W. High-speed infrared furnace [NASA-CASE-XIF-10466] c17 N69-25147

EDDINS, T. O. Space craft soft landing system Patent [NASA-CASE-XMF-02108] c31 N70-36845

Missile launch release system Patent [NASA-CASE-XMF-03198] c30 N70-40353

EDLESON, S. K. Latch/ejector unit Patent [NASA-CASE-XLA-03538] c15 N71-24897

EDMAN, C. W. Electrical switching device Patent [NASA-CASE-NFC-10037] c09 N71-19610

EDWARDS, G. G. Flight craft Patent [NASA-CASE-XAC-02058] c02 N71-16087

EDWARDS, T. E. Filtering device [NASA-CASE-NFS-22729-1] c32 N76-21366

EGGERS, A. J., JR. Flight craft Patent [NASA-CASE-XAC-02058] c02 N71-16087

EGLI, P. H. Method of forming transparent films of ZnO [NASA-CASE-FRC-10019] c15 N73-12487

EBRENFELD, D. A. Excitation and detection circuitry for a flux responsive magnetic head [NASA-CASE-XNE-04183] c09 N69-24329

Incremental tape recorder and data rate converter Patent [NASA-CASE-XNE-02778] c08 N71-22710

EICHENBRENNER, F. E. Hydraulic grip Patent [NASA-CASE-XLA-05100] c15 N71-17696

Light shield and infrared reflector for fatigue testing Patent [NASA-CASE-XIA-01782] c14 N71-26136

Anti-buckling fatigue test assembly [NASA-CASE-LAB-10426-1] c09 N74-19528

EICHENTHAL, J. Wide angle long eye relief eyepiece Patent [NASA-CASE-XMS-06056-1] c23 N71-24857

EISENBERGER, I. Data compressor Patent [NASA-CASE-XNP-04067] c08 N71-22707

ELACHI, C. Acoustically controlled distributed feedback laser [NASA-CASE-NFO-13175-1] c36 N75-31427

Diffused waveguiding capillary tube with distributed feedback for a gas laser [NASA-CASE-NFC-13544-1] c36 N76-18428

Fiber distributed feedback laser [NASA-CASE-NFO-13531-1] c36 N76-24553

Distributed feedback acoustic surface wave oscillator [NASA-CASE-NFO-13673-1] c71 N77-26919

ELDER, W. D. Internal flare angle gauge Patent [NASA-CASE-XNP-04415] c14 N71-24693

ELIA, A. D. Monopulse system with an electronic scanner [NASA-CASE-IGS-05582] c07 N69-27460

ELIASON, J. T. Photovoltaic cell array [NASA-CASE-NFS-22458-1] c44 N77-10635

ELKINS, W. Flexible joint for pressurizable garment [NASA-CASE-MSC-11072] c54 N74-32546

Liquid cooled brassiere and method of diagnosing malignant tumors therewith [NASA-CASE-ARC-11007-1] c52 N77-14736

ELLENBA, D. D. Continuous magnetic flux pump [NASA-CASE-XNP-01187] c15 N73-28516

Superconductive magnetic-field-trapping device [NASA-CASE-XNP-01185] c26 N73-28710

Magnetic flux pump [NASA-CASE-XNP-01188] c15 N73-32361

Material suspension within an acoustically excited resonant chamber [NASA-CASE-NFO-13263-1] c12 N75-24774

Heat operated cryogenic electrical generator [NASA-CASE-NFO-13303-1] c20 N75-24637

Magnetometer using superconducting rotating body [NASA-CASE-NFO-13388-1] c35 N76-16390

Acoustic energy shaping [NASA-CASE-NFO-13802-1] c71 N76-18886

ELLENB, W. B. Method of evaluating moisture barrier properties of encapsulating materials Patent [NASA-CASE-NFO-10051] c18 N71-24934

ELLIOTT, D. G. Magneto-hydrodynamic induction machine [NASA-CASE-XNP-07481] c25 N69-21929

Two-fluid magneto-hydrodynamic system and method for thermal-electric power conversion Patent [NASA-CASE-XNP-00644] c03 N70-36803

Two phase flow system with discrete impinging two-phase jets [NASA-CASE-NFO-11556] c12 N72-25292

ELLIOTT, R. L. Preparation of ordered poly /arylenesiloxane/ polymers [NASA-CASE-XNP-10753] c06 N71-11237

Fluorinated esters of polycarboxylic acids [NASA-CASE-NFS-21040-1] c06 N73-30098

ELLIS, D. E. Integrated lift/drag controller for aircraft [NASA-CASE-ARC-10456-1] c05 N75-12930

ELLIS, S. G. Simple method of making photovoltaic junctions Patent [NASA-CASE-XNP-01960] c09 N71-23027

Method of electrolytically binding a layer of semiconductors together Patent [NASA-CASE-XNP-01959] c26 N71-23043

Method of changing the conductivity of vapor deposited gallium arsenide by the introduction of water into the vapor deposition atmosphere Patent [NASA-CASE-XNP-01961] c26 N71-29156

EMDE, W. D. Etching of aluminum for bonding Patent [NASA-CASE-XNP-02303] c17 N71-23828

EMERY, J. C. Laser grating interferometer Patent [NASA-CASE-XIA-04295] c16 N71-24170

ENGEL, A. Digital video display system using cathode ray tube [NASA-CASE-NFO-11342] c09 N72-25248

Symmetrical odd-modulus frequency divider [NASA-CASE-NFO-13426-1] c33 N75-31330

Digital data reformatter/deserializer [NASA-CASE-NFO-13676-1] c60 N77-24781

ENGLAND, C. Hydrogen-bromine secondary battery [NASA-CASE-NFO-13237-1] c44 N76-18641

Zinc-halide battery with molten electrolyte [NASA-CASE-NFO-11961-1] c44 N76-18643

ENGLAR, K. G. Artificial gravity spin deployment system Patent [NASA-CASE-XNP-02595] c31 N71-21881

EWIE, R. B. Method of repairing discontinuity in fiberglass structures [NASA-CASE-LAB-10416-1] c24 N74-30001

ENRIQUEZ, E.
A system for synchronizing synthesizers of
communication systems
[NASA-CASE-GSC-12148-1] c32 N77-22314

ENSTROM, R. E.
Water cooled contactor for anode in carbon arc
mechanism
[NASA-CASE-XMS-03700] c15 N69-24266

EPPS, C. H., JR.
Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-1] c54 N76-22914
Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-2] c52 N77-27694

EPSTEIN, J.
Segmenting lead telluride-silicon germanium
thermoelements Patent
[NASA-CASE-IGS-05718] c26 N71-16037
Tungsten contacts on silicon substrates
[NASA-CASE-GSC-10695-1] c09 N72-25259

EPSTEIN, P.
Drying apparatus for photographic sheet material
[NASA-CASE-GSC-11074-1] c14 N73-28489

ERB, R. E.
Heat shield Patent
[NASA-CASE-XMS-00486] c33 N70-33344

ERICKSON, W. D.
Hypersonic test facility Patent
[NASA-CASE-XIA-00378] c11 N71-15925
Hypersonic test facility Patent
[NASA-CASE-XIA-05378] c11 N71-21475
Ablation article and method
[NASA-CASE-LAR-10439-1] c33 N73-27796

ERLICHMAN, L.
Telemetry processor
[NASA-CASE-GSC-11388-1] c07 N73-24187

ERPERBACH, E.
Means and methods of depositing thin films on
substrates Patent
[NASA-CASE-XMP-00595] c15 N70-34967
Process for reducing secondary electron emission
Patent
[NASA-CASE-XMF-09469] c24 N71-25555
Method of producing a storage bulb for an atomic
hydrogen maser
[NASA-CASE-NFO-13050-1] c36 N75-15029

ERRETT, D. D.
Canopus detector including automotive gain
control of photomultiplier tube Patent
[NASA-CASE-XMP-03914] c21 N71-10771

ESCHER, W. J. D.
Attitude and propellant flow control system and
method Patent
[NASA-CASE-XMF-00185] c21 N70-34539
Composite powerplant and shroud therefor Patent
[NASA-CASE-XIA-01043] c28 N71-10780
Injector assembly for liquid fueled rocket
engines Patent
[NASA-CASE-XMF-00968] c28 N71-15660

ESGAR, J. E.
Thin-walled pressure vessel Patent
[NASA-CASE-XIE-04677] c15 N71-10577
Ophthalmic liquifaction pump
[NASA-CASE-LFW-12051-1] c52 N75-33640

ESKIN, M. B., JR.
Random function tracer Patent
[NASA-CASE-XIA-01401] c15 N71-21179

ESPY, P. W.
Coaxial high density, hypervelocity plasma
generator and accelerator with ionizable metal
disc
[NASA-CASE-MFS-20585] c25 N72-32688

ESTES, E. G.
Rocket nozzle test method Patent
[NASA-CASE-NFO-10311] c31 N71-15643

ESTES, H. P.
Apparatus for making diamonds
[NASA-CASE-MFS-20698] c15 N72-20446
Process for making diamonds
[NASA-CASE-MFS-20698-2] c15 N73-19457

ETSIEN, I.
A cantilever mounted resilient pad gas bearing
[NASA-CASE-LFW-12569-1] c37 N77-24496

EUHARS, A. G.
Device for measuring electron-beam intensities
and for subjecting materials to electron
irradiation in an electron microscope
[NASA-CASE-IGS-01725] c14 N69-39982
Foamed in place ceramic refractory insulating
material Patent
[NASA-CASE-IGS-02435] c18 N71-22998

EULITZ, W. R.
Slosh suppressing device and method Patent
[NASA-CASE-XMF-00658] c12 N70-38997

EVANS, D. D.
Ignition means for monopropellant Patent
[NASA-CASE-XMF-00876] c28 N70-41311

EVANS, D. G.
Multistage multiple-reentry turbine Patent
[NASA-CASE-XIE-00170] c15 N70-36412
Multistage multiple-reentry turbine Patent
[NASA-CASE-XIE-00085] c28 N70-39895

EVANS, E. R.
Strain sensor for high temperatures Patent
[NASA-CASE-XMP-09205] c14 N71-17657

EVANS, F. D.
Autoignition test cell Patent
[NASA-CASE-KSC-10198] c11 N71-28629

EVANS, G. A.
Fiber distributed feedback laser
[NASA-CASE-NFO-13531-1] c36 N76-24553

EVANS, H. E.
Mechanical capacitor
[NASA-CASE-GSC-12030-1] c44 N76-30652

EVANS, J.
Millimeter wave antenna system Patent Application
[NASA-CASE-GSC-10949-1] c07 N71-28965
Solenoid valve including guide for armature and
valve member
[NASA-CASE-GSC-10607-1] c15 N72-20442
Nutation damper
[NASA-CASE-GSC-11205-1] c15 N73-25513

EVANS, J. C., JR.
Rapidly pulsed, high intensity, incoherent light
source
[NASA-CASE-XIE-2529-3] c33 N74-20859
High power laser apparatus and system
[NASA-CASE-XIE-2529-2] c36 N75-27364
Solar cell collector and method for producing same
[NASA-CASE-LFW-12552-1] c44 N77-17564
Method for producing solar energy panels by
automatic
[NASA-CASE-LFW-12541-1] c44 N77-22615
Application of semiconductor diffusants to solar
cells by screen printing
[NASA-CASE-LFW-12775-1] c44 N77-24589
Method for fabricating solar cells having
integral collector grids
[NASA-CASE-LFW-12819-1] c44 N77-24593

EVANS, J. H., JR.
System and method for tracking a signal source
[NASA-CASE-HQN-10880-1] c32 N75-30385

EVANS, R. E.
Device for tensioning test specimens within an
hermetically sealed chamber
[NASA-CASE-MFS-23281-1] c35 N77-22450

EVENSEN, D. A.
Buoyant anti-slosh system Patent
[NASA-CASE-XIA-04605] c32 N71-16106

EVVARD, J. C.
Ophthalmic method and apparatus
[NASA-CASE-LFW-11669-1] c05 N73-27062

EWEN, H. I.
Method and means for providing an absolute power
measurement capability Patent
[NASA-CASE-BEC-11020] c14 N71-26774
Clear air turbulence detector
[NASA-CASE-ERC-10081] c14 N72-28437

EXTON, R. J.
Stack plume visualization system
[NASA-CASE-LAR-11675-1] c45 N76-17656
TV fatigue crack monitoring system
[NASA-CASE-LAR-11490-1] c35 N76-28530

FEENKIEL, F. D.
Fluid power transmitting gas bearing Patent
[NASA-CASE-BEC-10097] c15 N71-28465

F

FARTH, P. A.
Automatic recording McLeod gauge Patent
[NASA-CASE-XIE-03280] c14 N71-23093

FAGET, H. A.
Survival couch Patent
[NASA-CASE-XIA-00118] c05 N70-33285
Aerial capsule emergency separation device Patent
[NASA-CASE-XIA-00115] c03 N70-33343
Space capsule Patent
[NASA-CASE-XIA-00149] c31 N70-37938

INVENTOR INDEX

PINK, J. W.

Space capsule Patent
[NASA-CASE-XIA-01332] c31 N71-15664

Space shuttle vehicle and system
[NASA-CASE-MSC-12432] c31 N73-14854

Space vehicle system
[NASA-CASE-MSC-12561-1] c18 N76-17185

PAGOT, R. J.
Gas low pressure low flow rate metering system
Patent
[NASA-CASE-FRC-10022] c12 N71-26546

Respirator monitor
[NASA-CASE-FRC-10012] c14 N72-17329

PAKAN, J. C.
Superconducting alternator
[NASA-CASE-XLE-02824] c03 N69-39890

Superconducting alternator Patent
[NASA-CASE-XLE-02823] c09 N71-23443

PALBEL, G.
Multi-lobar scan helix sensor Patent
[NASA-CASE-IGS-00809] c21 N70-35427

PALES, C. L., JR.
Magnetometer
[NASA-CASE-LAR-11617-2] c35 N77-17430

PALK, W. C.
Miniature vibration isolator Patent
[NASA-CASE-XIA-01019] c15 N70-40156

Canister closing device Patent
[NASA-CASE-XIA-01446] c15 N71-21528

PANG, P.
Recovery of radiation damaged solar cells
through thermal annealing
[NASA-CASE-IGS-04047-2] c03 N72-11062

PAWWIN, B. B.
System for the measurement of ultra-low stray
light levels
[NASA-CASE-MFS-23513-1] c74 N77-14842

PARNSWORTH, D. I.
Phototransistor imaging system
[NASA-CASE-MFS-20809] c23 N73-13660

Solid-state current transformer
[NASA-CASE-MFS-22560-1] c33 N77-14335

PARNSWORTH, P. D.
Space simulation and radiative property testing
system and method Patent
[NASA-CASE-MFS-20096] c14 N71-30026

PARBELL, R.
Lead attachment to high temperature devices
[NASA-CASE-ERC-10224] c09 N72-25261

Wide temperature range electronic device with
lead attachment
[NASA-CASE-ERC-10224-2] c09 N73-27150

PARRIS, C. D.
Storage battery comprising negative plates of a
wedge shaped configuration
[NASA-CASE-NFO-11806-1] c44 N74-19693

PARTING, W. B.
Device for determining relative angular position
between a spacecraft and a radiation emitting
celestial body
[NASA-CASE-GSC-11444-1] c14 N73-28490

PASSBENDER, A. G.
Electrical conductivity cell and method for
fabricating the same
[NASA-CASE-ARC-10810-1] c33 N76-19339

PAULNER, R. D.
Bonding graphite with fused silver chloride
[NASA-CASE-IGS-00963] c15 N69-39735

PAY, R. J.
Metal shearing energy absorber
[NASA-CASE-BQN-10638-1] c15 N73-30460

PEAKES, P.
Gauge calibration by diffusion
[NASA-CASE-IGS-07752] c14 N73-30390

PEALEY, R. D.
Bacteria detection instrument and method
[NASA-CASE-GSC-11533-1] c14 N73-13435

PEARNEBOUGH, B. T.
Parallel-plate viscometer with double diaphragm
suspension
[NASA-CASE-NFO-11387] c14 N73-14429

PEATHERSTON, A. B.
Method of fluxless brazing and diffusion bonding
of aluminum containing components
[NASA-CASE-MSC-14435-1] c37 N76-18455

PEDOB, J. V.
Stretch de-spin mechanism Patent
[NASA-CASE-IGS-00619] c30 N70-40016

PEDONS, B. P.
Parallel-plate viscometer with double diaphragm
suspension
[NASA-CASE-NFO-11387] c14 N73-14429

PEERENKAMP, L. G.
Surface finishing
[NASA-CASE-MSC-12631-1] c24 N77-28225

Surface finishing
[NASA-CASE-MSC-12631-2] c05 N77-31131

PEILRE, C. E.
Control of transverse instability in rocket
combustors Patent
[NASA-CASE-XLE-04603] c33 N71-21507

PEINBERG, P. B.
Digital telemetry system Patent
[NASA-CASE-IGS-01812] c07 N71-23001

Programmable telemetry system Patent
[NASA-CASE-GSC-10131-1] c07 N71-24624

PEINSTEIN, L.
Microwave flaw detector Patent
[NASA-CASE-ARC-10009-1] c15 N71-17822

Method and apparatus for swept-frequency
impedance measurements of welds
[NASA-CASE-ARC-10176-1] c15 N72-21464

PELDSTEIN, C.
Subminiature insertable force transducer
[NASA-CASE-NFO-13423-1] c33 N75-31329

Miniature muscle displacement transducer
[NASA-CASE-NFO-13519-1] c33 N76-19338

Myocardium wall thickness transducer and
measuring method
[NASA-CASE-NFO-13644-1] c52 N76-29895

Catheter tip force transducer for cardiovascular
research
[NASA-CASE-NFO-13643-1] c52 N76-29896

PELL, D. M.
Flexible pile thermal barrier seal
[NASA-CASE-MSC-19568-1] c37 N76-23585

PELTHER, W. B.
Field effect transistor and method of
construction thereof
[NASA-CASE-MFS-23312-1] c33 N76-26394

Multilevel metallization method for fabricating
a metal oxide semiconductor device
[NASA-CASE-MFS-23541-1] c33 N77-27308

PENG, S. Y.
Regulated dc-to-dc converter for voltage step-up
or step-down with input-output isolation
[NASA-CASE-BQN-10792-1] c33 N74-11049

PENTRESS, C. E.
Expanding center probe and drogue Patent
[NASA-CASE-XMS-03613] c31 N71-16346

PERBICK, J. B.
Accumulator
[NASA-CASE-MFS-19287-1] c34 N77-30399

PERGUSON, R. E.
Two-step rocket engine bipropellant valve Patent
[NASA-CASE-XMS-04890-1] c15 N70-22192

PERRARA, L. J.
Collapsible Apollo couch
[NASA-CASE-MSC-13140] c05 N72-11085

PESSLER, T. E.
Thin window, drifted silicon, charged particle
detector
[NASA-CASE-XLE-10529] c14 N69-23191

Method of forming thin window drifted silicon
charged particle detector Patent
[NASA-CASE-XLE-00808] c24 N71-10560

FIELDS, S. A.
Device and method for determining X ray
reflection efficiency of optical surfaces
[NASA-CASE-MFS-20243] c23 N73-13662

PIET, O. O.
Electrohydraulic control valve Patent
[NASA-CASE-NFO-10416] c12 N71-27332

FIGGINS, D. A.
Adaptive system and method for signal generation
Patent
[NASA-CASE-GSC-11367] c10 N71-26374

FILIP, G. L.
Storage container for electronic devices Patent
[NASA-CASE-MFS-20075] c09 N71-26133

Method of coating through-holes Patent
[NASA-CASE-XMP-05999] c15 N71-29032

FINDL, E.
Electrolytically regenerative hydrogen-oxygen
fuel cell Patent
[NASA-CASE-XLE-04526] c03 N71-11052

PINK, J. W.
Bus voltage compensation circuit for controlling
direct current motor

[NASA-CASE-XMS-04215-1]	c09 N69-39987	[NASA-CASE-XLA-03135]	c32 N71-16428
PINKE, R. C.		Arbitrarily shaped model survey system Patent	
Electrode and insulator with shielded dielectric junction		[NASA-CASE-LAR-10098]	c32 N71-26681
[NASA-CASE-XLE-03778]	c09 N69-21542	Electro-mechanical sine/cosine generator	
Pressure monitoring with a plurality of ionization gauges controlled at a central location Patent		[NASA-CASE-LAR-10503-1]	c09 N72-21248
[NASA-CASE-XLE-00787]	c14 N71-21090	Measuring probe position recorder	
PINLEY, T. D.		[NASA-CASE-LAR-10806-1]	c35 N74-32877
Split range transducer		Electro-mechanical sine/cosine generator	
[NASA-CASE-XLE-11189]	c10 N72-20222	[NASA-CASE-LAR-11389-1]	c33 N77-26387
PINLEY, W. R.		PLAHERTY, R.	
Analog-to-digital converter		Thermally cascaded thermoelectric generator	
[NASA-CASE-HSC-13110-1]	c08 N72-22163	[NASA-CASE-WFO-10753]	c03 N72-26031
PINWIE, C. J.		PLANN, D. L.	
Insertion loss measuring apparatus having transformer means connected across a pair of bolometers Patent		Electric discharge for treatment of trace contaminants	
[NASA-CASE-XNP-01193]	c10 N71-16057	[NASA-CASE-HSC-10975-1]	c54 N77-24771
PISCHELL, D. R.		PLANNERT, E. J.	
A cervix-to-rectum measuring device in a radiation applicator for use in the treatment of cervical cancer		Method and apparatus for controllably heating fluid Patent	
[NASA-CASE-GSC-12081-2]	c52 N77-26796	[NASA-CASE-XNP-04237]	c33 N71-16278
PISCHEE, J. A.		PLATAU, C. R.	
Adjustable tension wire guide Patent		Variable ratio mixed-mode bilateral master-slave control system for shuttle remote manipulator system	
[NASA-CASE-XMS-02383]	c15 N71-15918	[NASA-CASE-HSC-14245-1]	c18 N75-27041
PISCHEE, J. R.		PLATTAU, T.	
An interleaving device		Wideband heterodyne receiver for laser communication system	
[NASA-CASE-GSC-12111-2]	c60 N77-31800	[NASA-CASE-GSC-12053-1]	c32 N77-28346
FISH, D. C.		FLEETWOOD, C. H., JR.	
Spin forming tubular elbows Patent		Method of treating the surface of a glass member	
[NASA-CASE-XNP-01083]	c15 N71-22723	[NASA-CASE-GSC-12110-1]	c27 N77-32308
FISH, R. H.		FLEISCHMAN, G. L.	
Fiber modified polyurethane foam for ballistic protection		Flat-plate heat pipe	
[NASA-CASE-ARC-10714-1]	c27 N76-15310	[NASA-CASE-GSC-11998-1]	c34 N77-32413
FISH, R. H.		FLETCHER, E. A.	
Auditory display for the blind		Apparatus for igniting solid propellants Patent	
[NASA-CASE-ECN-10832-1]	c71 N74-21014	[NASA-CASE-XLE-00207]	c28 N70-33375
FISHER, A.		Method of igniting solid propellants Patent	
Process for making BP shielded cable connector assemblies and the products formed thereby		[NASA-CASE-XIF-01988]	c27 N71-15634
[NASA-CASE-GSC-11215-1]	c09 N73-28083	FLETCHER, I. L.	
Microscope multi-angle, reflection, viewing adaptor and photographic recording system		Satellite interlace synchronization system	
[NASA-CASE-GSC-11690-1]	c14 N73-28499	[NASA-CASE-GSC-10390-1]	c07 N72-11149
FITCH, E. J.		FLETCHER, J. C.	
Modulator for tone and binary signals		Heat flow calorimeter	
[NASA-CASE-GSC-11743-1]	c32 N75-24981	[NASA-CASE-GSC-11434-1]	c34 N74-27859
FITTING, R. C.		FLIPPIN, A.	
Phase modulator Patent		Sun angle calculator	
[NASA-CASE-HSC-13201-1]	c07 N71-28429	[NASA-CASE-HSC-12617-1]	c35 N76-29552
PITTON, J. A., JR.		FLORES, A. L.	
Multiple orifice throttle valve Patent		Field ionization electrodes Patent	
[NASA-CASE-XNP-09698]	c15 N71-18580	[NASA-CASE-BEC-10013]	c09 N71-26678
PITZER, G. E.		FLOYD, E. L.	
A machine for use in monitoring fatigue life for a plurality of elastic specimens		High impact pressure regulator Patent	
[NASA-CASE-WFO-13731-1]	c39 N76-17427	[NASA-CASE-WFO-10175]	c14 N71-18625
PITZGERALD, D. J.		FOGAL, G. L.	
Ion thruster with a combination keeper electrode and electron baffle		Automatic blowback sampling	
[NASA-CASE-NPC-11880]	c28 N73-24783	[NASA-CASE-HSC-14640-1]	c54 N76-14804
PITZGERALD, J. J.		Fluid mass sensor for a zero gravity environment	
Flow test device		[NASA-CASE-HSC-14653-1]	c35 N77-19385
[NASA-CASE-XMS-04917]	c14 N69-24257	FOHLEW, G. M.	
PITZGERALD, J. W.		Intumescent paints Patent	
Visual examination apparatus		[NASA-CASE-ARC-10099-1]	c18 N71-15469
[NASA-CASE-ARC-10329-1]	c05 N73-26072	Transparent fire resistant polymeric structures	
Visual examination apparatus		[NASA-CASE-ARC-10813-1]	c27 N76-16230
[NASA-CASE-EE-ARC-10329-2]	c52 N76-30793	FONTANA, A.	
PITZGERALD, T. H.		Solar sensor having coarse and fine sensing with matched preirradiated cells and method of selected cells Patent	
A solid state acoustic variable time delay line Patent		[NASA-CASE-XLA-01584]	c14 N71-23269
[NASA-CASE-BEC-10032]	c10 N71-25900	FOOTE, E. H.	
PITZNAURICH, M. W.		Adaptive system and method for signal generation Patent	
Retrodirective modulator Patent		[NASA-CASE-GSC-11367]	c10 N71-26374
[NASA-CASE-GSC-10062]	c14 N71-15605	FORBES, S. G.	
Apparatus for simulating optical transmission links		Apparatus for field strength measurement of a space vehicle Patent	
[NASA-CASE-GSC-11877-1]	c74 N76-18913	[NASA-CASE-XLE-00820]	c14 N71-16014
Polarization compensator for optical communications		FORD, A. G.	
[NASA-CASE-GSC-11782-1]	c74 N76-30053	Rock drill for recovering samples	
PLAGGE, B.		[NASA-CASE-XNP-07478]	c14 N69-21923
Vibrating structure displacement measuring instrument Patent		Electrically-operated rotary shutter Patent	
		[NASA-CASE-XNP-00637]	c14 N70-40273
		Motion restraining device	
		[NASA-CASE-WFO-13619-1]	c37 N75-22748
		FORD, F. R.	
		Coulometer and third electrode battery charging	

circuit Patent [NASA-CASE-GSC-10487-1]	c03 N71-24719	High temperature cobalt-base alloy Patent [NASA-CASE-XLE-00726]	c17 N71-15644
FOED, R. E. Antenna system using parasitic elements and two driven elements at 90 deg angle fed 180 deg out of phase Patent [NASA-CASE-XIA-00414]	c07 N70-38200	High temperature cobalt-base alloy Patent [NASA-CASE-XLE-02991]	c17 N71-16025
FORBAND, L. Solar cell mounting Patent [NASA-CASE-XNF-00826]	c03 N71-20895	Nickel-base alloy containing Mo-W-Al-Cr- Ta-Zr-C-Nb-B Patent [NASA-CASE-XLE-02082]	c17 N71-16026
FORBES, A. F. Method of making silicon solar cell array [NASA-CASE-LEW-11069-1]	c44 N74-14784	High temperature ferromagnetic cobalt-base alloy Patent [NASA-CASE-XLE-03629]	c17 N71-23248
Encapsulated solar cell modules [NASA-CASE-LEW-12185-1]	c44 N77-15490	Liquid spray cooling method Patent [NASA-CASE-XLE-00027]	c33 N71-29152
Solar cell shingle [NASA-CASE-LEW-12587-1]	c44 N77-31601	Method of forming superalloys [NASA-CASE-LEW-10805-1]	c15 N73-13465
FORLIFER, W. E. Landing gear Patent [NASA-CASE-XMF-01174]	c02 N70-41589	Cobalt-base alloy [NASA-CASE-LEW-10436-1]	c17 N73-32415
FORSTNER, A. K. Utilitical separator for rockets Patent [NASA-CASE-XNF-00425]	c11 N70-38202	Method of heat treating a formed powder product material [NASA-CASE-LEW-10805-3]	c26 N74-10521
FORTIN, A. Method of electroforming a rocket chamber [NASA-CASE-LEW-11118-1]	c20 N74-32919	Method of forming articles of manufacture from superalloy powders [NASA-CASE-LEW-10805-2]	c37 N74-13179
A heat exchanger and method of making [NASA-CASE-LEW-12441-1]	c34 N75-19580	Nickel base alloy [NASA-CASE-LEW-12270-1]	c26 N77-32280
Rocket chamber and method of making [NASA-CASE-LEW-11118-2]	c20 N76-14191	FREDRICKSON, C. A. Energy absorption device Patent [NASA-CASE-XNF-01848]	c15 N71-28959
FOSTER, J. V. Mechanically limited, electrically operated hydraulic valve system for aircraft controls Patent [NASA-CASE-XAC-00048]	c02 N71-29128	FREEMAN, E. S. Air frame drag balance Patent [NASA-CASE-XIA-00113]	c14 N70-33386
Magnetic position detection method and apparatus [NASA-CASE-ARC-10179-1]	c21 N72-22619	FREGGENS, E. A. Thermal flux transfer system [NASA-CASE-XEO-12070-1]	c28 N73-32606
FOSTER, L. E. Magnetomotive metal working device Patent [NASA-CASE-XMF-03793]	c15 N71-24833	FRECHER, J. C. Nickel base alloy [NASA-CASE-LEW-10874-1]	c17 N72-22535
FOULLE, J. Bit error rate measurement above and below bit rate tracking threshold [NASA-CASE-HSC-12743-1]	c32 N77-19290	FRIDRICH, C. W. Apparatus for welding sheet material [NASA-CASE-XMS-01330]	c37 N75-27376
FOULLE, J. T. Parasitic suppressing circuit [NASA-CASE-ERC-10403-1]	c10 N73-26228	FRIBBEL, G. O. Aircraft design concept [NASA-CASE-LAR-11852-1]	c05 N77-15027
FOX, W. E. Event recorder Patent [NASA-CASE-XIA-01832]	c14 N71-21006	FRIDELL, M. V. Positive isolation disconnect [NASA-CASE-HSC-16043-1]	c37 N77-15397
FRANCISCO, A. C. Process for applying a protective coating for salt bath brazing Patent [NASA-CASE-XLE-00046]	c15 N70-33311	FRIDEN, H. J. Automated clinical system for chromosome analysis [NASA-CASE-XFO-13913-1]	c52 N77-19750
FRANCISCUS, L. C. Supersonic-combustion rocket [NASA-CASE-LEW-11058-1]	c20 N74-13502	FRIEDERICH, J. E. Biomedical radiation detecting probe Patent [NASA-CASE-XMS-01177]	c05 N71-19440
FRANK, H. A. Electrolytically regenerative hydrogen-oxygen fuel cell Patent [NASA-CASE-XLE-04526]	c03 N71-11052	FRIEDRICH, E. W. Reentry vehicle leading edge Patent [NASA-CASE-XIA-00165]	c31 N70-33242
FRANKLIN, W. J. Segmented back-up bar Patent [NASA-CASE-XNF-00640]	c15 N70-39924	FRISBIE, H. F. Device for determining relative angular position between a spacecraft and a radiation emitting celestial body [NASA-CASE-GSC-11444-1]	c14 N73-28490
Portable alignment tool Patent [NASA-CASE-XNF-01452]	c15 N70-41371	FRITZEN, H., JR. Noncontaminating swabs [NASA-CASE-NFS-18100]	c15 N72-11390
FRASER, A. S. Water system virus detection [NASA-CASE-HSC-16098-1]	c51 N77-24755	FROMHLING, S. C. Casting propellant in rocket engine [NASA-CASE-LAR-11995-1]	c28 N77-10213
FRAYE, R. E. Cryogenic cooling system Patent [NASA-CASE-XFO-10467]	c23 N71-26654	FROST, J. D., JR. EEG sleep analyzer and method of operation Patent [NASA-CASE-HSC-13282-1]	c05 N71-24729
FRAYE, R. E. Vacuum evaporator with electromagnetic ion steering Patent [NASA-CASE-XFO-10331]	c09 N71-26701	Compressible biomedical electrode [NASA-CASE-HSC-13648]	c05 N72-27103
Strong thin membrane structure [NASA-CASE-XFO-14021-1]	c27 N77-32313	Snap-in compressible biomedical electrode [NASA-CASE-HSC-14623-1]	c52 N77-28717
FRAZIER, H. J. Junction range finder [NASA-CASE-HSC-10108]	c14 N73-25461	FRYER, T. B. Telemeter adaptable for implanting in an animal Patent [NASA-CASE-IAC-05706]	c05 N71-12342
FRECHER, J. C. High temperature nickel-base alloy Patent [NASA-CASE-XIE-00151]	c17 N70-33283	RF controlled solid state switch [NASA-CASE-ARC-10136-1]	c09 N72-22202
External liquid-spray cooling of turbine blades Patent [NASA-CASE-XIE-00037]	c28 N70-33372	Low power electromagnetic flowmeter providing accurate zero set [NASA-CASE-ARC-10362-1]	c14 N73-32326
Nickel-base alloy Patent [NASA-CASE-XIF-00283]	c17 N70-36616	Miniature ingestible telemeter devices to measure deep-body temperature [NASA-CASE-ABC-10583-1]	c52 N76-29894
		Induction powered biological radiosonde [NASA-CASE-ABC-11120-1]	c52 N77-23743
		FUCHS, J. C. Lightning current waveform measuring system [NASA-CASE-HSC-11018-1]	c33 N77-21320

FOHRHEISTER, P. F.
Random function tracer Patent
[NASA-CASE-XLA-01401] c15 N71-21179

FOJICKA, E. S.
Folding structure fabricated of rigid panels
[NASA-CASE-XEQ-02146] c18 N75-27040

FULCHER, C. W. G.
Automatic control of liquid cooling garment by cutaneous and external auditory meatus temperatures
[NASA-CASE-MSC-13917-1] c05 N72-15098

FULCHER, R. W.
Low speed phaselock speed control system
[NASA-CASE-GSC-11127-1] c09 N75-24758

FULLER, B. V.
Cable restraint
[NASA-CASE-LAR-10129-1] c15 N73-25512

Reefing system
[NASA-CASE-LAR-10129-2] c37 N74-20063

Binocular device for displaying numerical information in field of view
[NASA-CASE-LAR-11782-1] c74 N77-20882

FUNK, B. E., JR.
Optical probing of supersonic flows with statistical correlation
[NASA-CASE-MFS-20642] c14 N72-21407

FURCINITI, C. A.
Pulse-width modulation multiplier Patent
[NASA-CASE-XER-09213] c07 N71-12390

FURMAN, E. B.
Closed loop spray cooling apparatus
[NASA-CASE-LIW-11981-1] c37 N76-20486

Closed loop spray cooling apparatus
[NASA-CASE-LIW-11981-2] c34 N77-32434

FURNER, B. L.
Automated analysis of oxidative metabolites
[NASA-CASE-ARC-10469-1] c25 N75-12086

FURUNOTO, H. W.
Optical pump and driver system for lasers
[NASA-CASE-ERC-10283] c16 N72-25485

FYLER, W. F.
Very high intensity light source using a cathode ray tube
[NASA-CASE-XNP-01296] c33 N75-27250

FYHAT, A. L.
Interferometer-polarimeter
[NASA-CASE-NFO-11239] c14 N73-12446

Frequency scanning particle size spectrometer
[NASA-CASE-NFO-13606-1] c35 N75-19627

Particle size spectrometer and refractometer
[NASA-CASE-NFO-13614-1] c35 N75-19628

Forward-scatter polarimeter for determining the gaseous depolarization factor in the presence of polluting polydispersed particles
[NASA-CASE-NFO-13756-1] c35 N76-14434

High resolution Fourier interferometer-spectrophotopolarimeter
[NASA-CASE-NFO-13604-1] c35 N76-31490

G

GABROVIC, L. J.
Bismuth-lead coatings for gas bearings used in atmospheric environments and vacuum chambers Patent
[NASA-CASE-XGS-02011] c15 N71-20739

GADDIS, D. B.
Inorganic solid film lubricants Patent
[NASA-CASE-XMF-03988] c15 N71-21403

GADDY, E. B.
Optimum performance spacecraft solar cell system
[NASA-CASE-GSC-10669-1] c03 N72-20031

GADE, D. W.
Temperature regulation circuit Patent
[NASA-CASE-XNP-02792] c14 N71-28958

GAETANO, G.
Fast scan control for deflection type mass spectrometers
[NASA-CASE-LAR-10766-1] c14 N72-21432

Fast scan control for deflection type mass spectrometers
[NASA-CASE-LAR-11428-1] c35 N74-34857

GANN, R. F.
Analytical test apparatus and method for determining oxide content of alkali metal Patent
[NASA-CASE-IIE-01997] c06 N71-23527

Gels as battery separators for soluble electrode cells
[NASA-CASE-LIW-12364-1] c44 N77-22606

GAISER, E. E.
Color television systems using a single gun color cathode ray tube Patent
[NASA-CASE-ERC-10098] c09 N71-28618

GALE, G. F.
Flow rate switch
[NASA-CASE-NFO-10722] c09 N72-20199

GALLAGHER, R. E.
Construction and method of arranging a plurality of ion engines to form a cluster Patent
[NASA-CASE-XNP-02923] c28 N71-23081

High efficiency ionizer assembly Patent
[NASA-CASE-XNP-01954] c28 N71-28850

GALLO, A. J.
Rapid sync acquisition system Patent
[NASA-CASE-NFO-10214] c10 N71-26577

GARAVAGLIA, A. P.
Shoulder harness and lap belt restraint system
[NASA-CASE-ARC-10519-2] c05 N75-25915

GARBA, J. A.
Pressure seal Patent
[NASA-CASE-NFO-10796] c15 N71-27068

GARD, L. H.
Computerized system for translating a torch head
[NASA-CASE-MFS-23620-1] c37 N77-24497

GARDNER, D. E.
Wire grid forming apparatus Patent
[NASA-CASE-XLE-00023] c15 N70-33330

GARDNER, J. W.
Technique of elbow bending small jacketed transfer lines Patent
[NASA-CASE-XNP-10475] c15 N71-24679

GARDNER, H. S.
Differential pressure cell Patent
[NASA-CASE-XAC-00042] c14 N70-34816

GARDOS, H. H.
Refractory porcelain enamel passive control coating for high temperature alloys
[NASA-CASE-MFS-22324-1] c27 N75-27160

GARFEIN, A.
Pressure sensitive transducers Patent
[NASA-CASE-ERC-10087] c14 N71-27334

Electricity measurement devices employing liquid crystalline materials
[NASA-CASE-ERC-10275] c26 N72-25680

Semiconductor transducer device
[NASA-CASE-ERC-10087-2] c14 N72-31446

GARNIER, E. H.
Optical frequency waveguide Patent
[NASA-CASE-BQN-10541-1] c07 N71-26291

Laser machining apparatus Patent
[NASA-CASE-BQN-10541-2] c15 N71-27135

Optical frequency waveguide and transmission system Patent
[NASA-CASE-BQN-10541-4] c16 N71-27183

Optical frequency waveguide and transmission system
[NASA-CASE-BQN-10541-3] c23 N72-23695

GARNER, H. D.
Jet shoes
[NASA-CASE-XLA-08491] c05 N69-21380

Dynamic precession damper for spin stabilized vehicles Patent
[NASA-CASE-XLA-01989] c21 N70-34295

Attitude orientation of spin-stabilized space vehicles Patent
[NASA-CASE-XLA-00281] c21 N70-36943

Fluid pressure amplifier and system
[NASA-CASE-LAR-10868-1] c33 N74-11050

Servo valve
[NASA-CASE-LAR-11643-1] c37 N75-13268

Magnetic heading reference
[NASA-CASE-LAR-11387-1] c04 N76-20114

Magnetic heading reference
[NASA-CASE-LAR-11387-2] c04 N77-19056

GARRAHAN, W. H.
Solid state pulse generator with constant output width, for variable input width, in nanosecond range Patent
[NASA-CASE-XGS-03427] c10 N71-23029

Resettable monostable pulse generator Patent
[NASA-CASE-GSC-11139] c09 N71-27016

GARRIN, J. F., JR.
Mechanical stability augmentation system Patent
[NASA-CASE-XIA-06339] c02 N71-13422

GARWOOD, D. C.
Ionization vacuum gauge Patent
[NASA-CASE-XNP-00646] c14 N70-35666

GASTON, D. H.
Masking device Patent
[NASA-CASE-IXF-02092] c15 N70-42033

GASTON, E. P., JR.
Landing gear Patent
[NASA-CASE-IXF-01174] c02 N70-41589

GATES, D. W.
Stabilized zinc oxide coating compositions Patent
[NASA-CASE-IXF-07770-2] c18 N71-26772
Synthesis of zinc titanate pigment and coatings
containing the same
[NASA-CASE-MFS-12532] c18 N72-17532
Method of preparing zinc orthotitanate pigment
[NASA-CASE-MFS-23345-1] c27 N77-30237

GATES, J. D.
Self-erecting reflector Patent
[NASA-CASE-IGS-09190] c31 N71-16102

GATES, L. E., JR.
Method for fiberizing ceramic materials Patent
[NASA-CASE-IXP-00597] c18 N71-23088

GATEWOOD, J. E.
Thin film temperature sensor and method of
making same
[NASA-CASE-MFO-11775] c26 N72-28761

GATLIN, J. A.
Cartwheel satellite synchronization system Patent
[NASA-CASE-IGS-05579] c31 N71-15676
Gravity gradient attitude control system Patent
[NASA-CASE-GSC-10555-1] c21 N71-27324
Sampled data controller Patent
[NASA-CASE-GSC-10554-1] c08 N71-29033

GATTI, A.
Catalyst for growth of boron carbide single
crystal whiskers
[NASA-CASE-IRQ-03903] c15 N69-21922

GAUSE, E. L.
Restraint system for ergometer
[NASA-CASE-MFS-21046-1] c14 N73-27377
Ergometer
[NASA-CASE-MFS-21109-1] c05 N73-27941
Tilting table for ergometer and for other
biomedical devices
[NASA-CASE-MFS-21010-1] c05 N73-30078
Manual actuator
[NASA-CASE-MFS-21481-1] c37 N74-18127
Conductive elastomeric extensometer
[NASA-CASE-MFS-21049-1] c52 N74-27864
Ergometer calibrator
[NASA-CASE-MFS-21045-1] c35 N75-15932

GAVERIA, H. E.
Fallsafe multiple transformer circuit
configuration
[NASA-CASE-MFO-11078] c09 N72-25262

GAVRILLIS, T. G.
Turnstile and flared cone UHF antenna
[NASA-CASE-LAR-10970-1] c33 N76-14372

GDULA, W. G.
Recovery of radiation damaged solar cells
through thermal annealing
[NASA-CASE-IGS-04047-2] c03 N72-11062

GEBBEN, V. D.
Circuit for detecting initial systole and
diastolic notch
[NASA-CASE-LFW-11581-1] c54 N75-13531

GEDWILL, H. A.
Method of protecting the surface of a substrate
[NASA-CASE-LFW-11696-1] c37 N75-13261
Duplex aluminized coatings
[NASA-CASE-LFW-11696-2] c26 N75-19408

GEE, S. W.
Terminal guidance system
[NASA-CASE-FRC-10049-1] c04 N74-13420

GEHRING, W. E.
Apparatus for purging systems handling toxic,
corrosive, noxious and other fluids Patent
[NASA-CASE-IMS-01905] c12 N71-21089

GEIDREAN, W. A., JR.
Electric arc light source having undercut
recessed anode
[NASA-CASE-ABC-10266-1] c33 N75-29318

GEIER, D. J.
Shock absorbing support and restraint means Patent
[NASA-CASE-IMS-01240] c05 N70-35152

GEIPHEL, D. H.
Omnidirectional acceleration device Patent
[NASA-CASE-B[N-1(780)] c14 N71-30265

GRISE, P. E., JR.
PW/CW radar system
[NASA-CASE-MFS-22234-1] c32 N76-33364

GELB, I. L.
Method of repairing discontinuity in fiberglass
structures
[NASA-CASE-LAR-10416-1] c24 N74-30001

GELLES, E.
Wide angle long eye relief eyepiece Patent
[NASA-CASE-IMS-06056-1] c23 N71-24857

GENTEN, E. E.
Electronically resettable fuse Patent
[NASA-CASE-IGS-11177] c09 N71-27001

GEORGE, T. R., JR.
Device for installing rocket engines
[NASA-CASE-MFS-19220-1] c20 N76-22296

GERDTS, J. C.
Concentric differential gearing arrangement
[NASA-CASE-ARC-10462-1] c37 N74-27901

GERINGER, E. J.
Induction furnace with perforated tungsten foil
shielding Patent
[NASA-CASE-XLE-04026] c14 N71-23267

GERMANN, E. P., JR.
Radiation direction detector including means for
compensating for photocell aging Patent
[NASA-CASE-XLA-00183] c14 N70-40239

GERTSMA, L. W.
Foldable conduit Patent
[NASA-CASE-XLE-00620] c32 N70-41579

GETCHELL, D. E.
Pressure garment joint Patent
[NASA-CASE-IMS-09636] c05 N71-12344

GETTELHOF, C. C.
High powered arc electrodes
[NASA-CASE-LFW-11162-1] c33 N74-12913

GIACCONI, E.
X-ray reflection collimator adapted to focus
X-radiation directly on a detector Patent
[NASA-CASE-IRQ-04106] c14 N76-40240

GIANDONNICO, A.
Millimeter wave radiometer for radio astronomy
Patent
[NASA-CASE-IXF-09832] c30 N71-23723

GIANNINI, G. M.
Combination automatic-starting electrical plasma
torch and gas shutoff valve
[NASA-CASE-XLE-10717] c37 N75-29426

GIBSON, F. W.
Contour surveying system Patent
[NASA-CASE-XLA-08646] c14 N71-17586
Pressure operated electrical switch responsive
to a pressure decrease after a pressure increase
[NASA-CASE-LAR-10137-1] c09 N72-22204

GIFFIN, C. E.
Mass spectrometer with magnetic pole pieces
providing the magnetic fields for both the
magnetic sector and an ion-type vacuum pump
[NASA-CASE-MFO-13663-1] c35 N77-14406

GILBERT, G. J.
Apparatus for ballasting high frequency
transistors
[NASA-CASE-IGS-05003] c09 N69-24318

GILBERT, W. E.
Electrical conductivity cell and method for
fabricating the same
[NASA-CASE-ABC-10810-1] c33 N76-19339

GILCHRIST, C. E.
Signal-to-noise ratio estimating by taking ratio
of mean and standard deviation of integrated
signal samples Patent
[NASA-CASE-IXF-05254] c07 N71-20791

GILES, E. M. F.
Dye penetrant for surfaces subsequently
contacted by liquid oxygen Patent
[NASA-CASE-IXF-02221] c18 N71-27170

GILKISON, C. A.
Linear accelerator frequency control system Patent
[NASA-CASE-IGS-05441] c10 N71-22962

GILL, W. L.
Burn rate testing apparatus
[NASA-CASE-IMS-09690] c33 N72-25913

GILLERMAN, J. B.
Water management system and an electrolytic cell
therefor Patent
[NASA-CASE-HSC-10960-1] c03 N71-24718

GILLESPIE, W., JR.
Infrared scanner Patent
[NASA-CASE-XLA-00120] c21 N70-33181
Passive communication satellite Patent
[NASA-CASE-XLA-00210] c30 N70-40309

Alleviation of divergence during rocket launch Patent [NASA-CASE-XIA-00256]	c31 N71-15663	Ultraviolet and thermally stable polymer compositions [NASA-CASE-ARC-10592-2]	c27 N76-32315
Method of making an inflatable panel Patent [NASA-CASE-XIA-03497]	c15 N71-23052	GOERING, R. S. Open tube guideway for high speed air cushioned vehicles [NASA-CASE-LAR-10256-1]	c85 N74-34672
GILLETTE, R. E. Plasma cleaning device [NASA-CASE-MFS-22906-1]	c75 N76-24001	GOLD, R. S. Automotive gas turbine fuel control [NASA-CASE-LEW-12785-1]	c37 N77-13426
GILLEY, C. C. Shared memory for a fault-tolerant computer [NASA-CASE-NFO-13139-1]	c60 N76-21914	GOLDBERG, G. I. Reaction wheel scanner Patent [NASA-CASE-IGS-02629]	c14 N71-21082
GILLEY, P. J. Material fatigue testing system [NASA-CASE-MFS-20673]	c14 N73-20476	GOLDBERG, J. Automatic fault correction system for parallel signal channels Patent [NASA-CASE-MFP-03263]	c09 N71-18843
GILLIGAN, J. E. Method of preparing zinc orthotitanate pigment [NASA-CASE-MFS-23345-1]	c27 N77-30237	GOLDEN, D. E., JR. Contourograph system for monitoring electrocardiograms [NASA-CASE-MSC-13407-1]	c10 N72-20225
GILLMORE, W. F. Method and apparatus for high resolution spectral analysis [NASA-CASE-NFO-10748]	c08 N72-20177	Apparatus and method for processing Korotkov sounds [NASA-CASE-MSC-13999-1]	c52 N74-26626
GILMAN, R. H. Flanged major modular assembly jig [NASA-CASE-MSC-19372-1]	c39 N76-31562	GOLDMAN, G. C. High powered arc electrodes [NASA-CASE-LEW-11162-1]	c33 N74-12913
GILBERT, R. C. Omnidirectional microwave spacecraft antenna Patent [NASA-CASE-XIA-03114]	c09 N71-22888	GOLDSBERG, R. E. Ultraviolet and thermally stable polymer compositions [NASA-CASE-ARC-10592-1]	c27 N74-21156
GILWER, W. J. Honeycomb-laminate composite structure [NASA-CASE-ARC-10913-1]	c24 N76-26286	Ultraviolet and thermally stable polymer compositions [NASA-CASE-ARC-10592-2]	c27 N76-32315
GIN, W. Apparatus and method for control of a solid fueled rocket vehicle Patent [NASA-CASE-MFP-00217]	c28 N70-38181	GOLDSCHMIED, P. E. Shear modulated fluid amplifier Patent [NASA-CASE-MFS-10412]	c12 N71-17578
GIORGINI, E. A. Self-contained breathing apparatus [NASA-CASE-MSC-14733-1]	c54 N76-24900	GOLDSMITH, J. V. Solar battery with interconnecting means for plural cells Patent [NASA-CASE-MFP-06506]	c03 N71-11050
GIOVANNETTI, A., JR. High-temperature, high-pressure spherical segment valve Patent [NASA-CASE-XAC-00074]	c15 N70-34817	Solid state matrices [NASA-CASE-MFP-10591]	c03 N72-22041
GIRALA, A. S. Open type urine receptacle [NASA-CASE-MSC-12324-1]	c05 N72-22093	Solar cell panels with light transmitting plate [NASA-CASE-MFO-10747]	c03 N72-22042
GLASER, P. E. Apparatus for measuring thermal conductivity Patent [NASA-CASE-IGS-01052]	c14 N71-15992	GOLDSTEIN, A. W. Supersonic fan blading [NASA-CASE-LEW-11402-1]	c07 N74-28226
GLASSBY, E. A. Line following servosystem Patent [NASA-CASE-XAC-00001]	c15 N71-28952	GOLDSTEIN, R. E. Silica reusable surface insulation [NASA-CASE-ARC-10721-1]	c27 N76-22376
GLAWE, G. E. Enthalpy and stagnation temperature determination of a high temperature laminar flow gas stream Patent [NASA-CASE-XII-00266]	c14 N70-34156	Reaction cured glass and glass coatings [NASA-CASE-ARC-11051-1]	c27 N77-10201
Sensing piche [NASA-CASE-LEW-10281-1]	c14 N72-17327	GOLDSTEIN, I. Clear air turbulence detector [NASA-CASE-MFS-21244-1]	c36 N75-15028
GLEKAS, L. P. Compact scalar still Patent [NASA-CASE-XMS-04533]	c15 N71-23086	GOLDSTEIN, R. E. Correlation function apparatus Patent [NASA-CASE-MFP-00746]	c07 N71-21476
GLENN, C. G. Manual actuator [NASA-CASE-MFS-21481-1]	c37 N74-18127	Method and apparatus for mapping planets [NASA-CASE-MFO-11001]	c07 N72-21118
Conductive elastomeric extensometer [NASA-CASE-MFS-21049-1]	c52 N74-27864	Binary coded sequential acquisition ranging system [NASA-CASE-MFO-11194]	c08 N72-25209
GLENN, D. C. Method of lubricating rolling element bearings Patent [NASA-CASE-XII-09527]	c15 N71-17688	Apparatus for deriving synchronizing pulses from pulses in a single channel PCM communications system [NASA-CASE-MFO-11302-1]	c07 N73-13149
Rolling element bearings Patent [NASA-CASE-XII-09527-2]	c15 N71-26189	Method and apparatus for a single channel digital communications system [NASA-CASE-MFO-11302-2]	c32 N74-10132
GLOBUS, R. E. Process of forming particles in a cryogenic path Patent [NASA-CASE-MFO-10250]	c23 N71-16212	Digital demodulator-correlator [NASA-CASE-MFO-13982-1]	c32 N77-24341
GLOBE, W. L. Time division radio relay synchronizing system using different sync code words for in sync and out of sync conditions Patent [NASA-CASE-GSC-10373-1]	c07 N71-19773	GOODRICH, J. A. Locking device for turbine rotor blades Patent [NASA-CASE-MFP-00816]	c28 N71-28928
Tracking receiver Patent [NASA-CASE-IGS-08679]	c10 N71-21473	GOODWIN, F. E. Opto-mechanical subsystem with temperature compensation through isothermal design [NASA-CASE-GSC-12059-1]	c35 N77-27366
GLOBIA, R. E. Ultraviolet and thermally stable polymer compositions [NASA-CASE-ARC-10592-1]	c27 N74-21156	GOODWIN, R. A. Spectroscope equipment using a slender cylindrical reflector as a substitute for a slit Patent [NASA-CASE-IGS-08269]	c23 N71-26206
		GOODYEN, R. J. Stagnation pressure probe	

[NASA-CASE-LAR-11139-1] c35 N74-32878
GOOKIN, B.
 A system for synchronizing synthesizers of communication systems
 [NASA-CASE-GSC-12148-1] c32 N77-22314
GORDECH, B. L.
 Television noise reduction device
 [NASA-CASE-MSC-12607-1] c32 N75-21485
GORDECH, W. A.
 Arc electrode of graphite with ball tip Patent
 [NASA-CASE-XLE-04788] c09 N71-22987
GOEBLICK, D.
 Arterial pulse wave pressure transducer
 [NASA-CASE-GSC-11531-1] c52 N74-27566
GORSTEIN, M.
 Two color bcrizcn sensor
 [NASA-CASE-ERC-10174] c14 N72-25409
GOSS, W. C.
 High pulse rate high resolution optical radar system
 [NASA-CASE-NFO-11426] c07 N73-26119
GOODY, J. E.
 Capacitor power pak Patent Application
 [NASA-CASE-LAR-10367-1] c03 N70-26817
GOULL, C. W.
 Printed circuit board with bellows rivet connection Patent
 [NASA-CASE-XNP-05082] c15 N70-41960
GOULD, J. M.
 Static inverters which sum a plurality of waves Patent
 [NASA-CASE-XPF-00663] c08 N71-18752
 Acquisition and tracking system for optical radar
 [NASA-CASE-MFS-20125] c16 N72-13437
GOULE, W. I., JR.
 Millimeter wave antenna system Patent Application
 [NASA-CASE-GSC-10949-1] c07 N71-28965
GRAAE, J. W.
 Analytical test apparatus and method for determining oxide content of alkali metal Patent
 [NASA-CASE-XLE-01997] c06 N71-23527
GRABOWSKI, J. P.
 Target acquisition antenna
 [NASA-CASE-GSC-10064-1] c10 N72-22235
GRAFF, J.
 Amino acid analysis
 [NASA-CASE-NFO-12130-1] c25 N75-14844
GRAFSTEIN, D.
 Fluidic-thermochromic display device Patent
 [NASA-CASE-ERC-10031] c12 N71-18603
GRAHAM, O. L.
 Color television system
 [NASA-CASE-MSC-12146-1] c07 N72-17109
GRAHAM, R. W.
 Liquid storage tank venting device for zero gravity environment Patent
 [NASA-CASE-XLE-01449] c15 N70-41646
GRAN, A. A.
 Venting device for pressurized space suit helmet Patent
 [NASA-CASE-XMS-09652-1] c05 N71-26333
GRANA, D. C.
 Remote water monitoring system
 [NASA-CASE-LAR-11973-1] c43 N77-28563
GRANATA, R. L.
 Sidereal frequency generator Patent
 [NASA-CASE-IGS-02610] c14 N71-23174
GRANT, D. J.
 Passively regulated water electrolysis rocket engine Patent
 [NASA-CASE-IGS-08729] c28 N71-14044
 Precision thrust gage Patent
 [NASA-CASE-IGS-02319] c14 N71-22965
 Fluid flow meter with comparator reference means Patent
 [NASA-CASE-IGS-01331] c14 N71-22996
GRANT, G. B.
 Dual wavelength scanning Doppler velocimeter
 [NASA-CASE-ABC-10637-1] c35 N75-16783
GRANT, H. E.
 Spacecraft attitude sensor
 [NASA-CASE-GSC-10890-1] c21 N73-30640
GRANTHAM, W. I.
 Means for measuring the electron density gradients of the plasma sheath formed around a space vehicle Patent
 [NASA-CASE-ILA-06232] c25 N71-20563
 Antenna design for surface wave suppression Patent
 [NASA-CASE-XLA-10772] c07 N71-28980
GRAY, C. E.
 Optical characteristics measuring apparatus Patent
 [NASA-CASE-IMP-08840] c23 N71-16365
GRAY, D. T.
 Three-axis adjustable loading structure
 [NASA-CASE-ERC-10051-1] c35 N74-13129
GRAY, J. L.
 Automatic lightning detection and photographic system
 [NASA-CASE-KSC-10728-1] c14 N73-32319
GRAY, V. E.
 Boiler for generating high quality vapor Patent
 [NASA-CASE-XLE-00785] c33 N71-16104
 Ablative system
 [NASA-CASE-LEW-10359] c33 N72-25911
 Ablative system
 [NASA-CASE-LEW-10359-2] c33 N73-25952
 Space vehicle with artificial gravity and earth-like environment
 [NASA-CASE-LEW-11101-1] c31 N73-32750
GRAYSON, J. B.
 Voltage-current characteristic simulator Patent
 [NASA-CASE-XMS-01554] c10 N71-10578
GREENE, V. J.
 Inductive liquid level detection system Patent
 [NASA-CASE-XLE-01609] c14 N71-10500
GREENE, P. J.
 Variable ratio mixed-mode bilateral master-slave control system for shuttle remote manipulator system
 [NASA-CASE-MSC-14245-1] c18 N75-27041
GREENE, A. T.
 Method and apparatus for nondestructive testing of pressure vessels
 [NASA-CASE-NFO-12142-1] c38 N76-28563
GREENE, E. D.
 Linear sawtooth voltage-wave generator employing transistor timing circuit having capacitor-zener diode combination feedback Patent
 [NASA-CASE-XMS-01315] c09 N70-41675
GREENE, E. A.
 Highly efficient antenna system using a corrugated horn and scanning hyperbolic reflector
 [NASA-CASE-NFO-13568-1] c32 N76-21365
GREENE, E. G.
 Traversing probe Patent
 [NASA-CASE-XFR-02007] c12 N71-24692
 Layout tool Patent
 [NASA-CASE-ERC-10005] c15 N71-26145
 Method and apparatus for attaching physiological monitoring electrodes Patent
 [NASA-CASE-XFR-07658-1] c05 N71-26293
GREENE, E. E.
 Serial digital decoder Patent
 [NASA-CASE-NFO-10150] c08 N71-24650
 Apparatus for deriving synchronizing pulses from pulses in a single channel PCM communications system
 [NASA-CASE-NFO-11302-1] c07 N73-13149
 Method and apparatus for a single channel digital communications system
 [NASA-CASE-NFO-11302-2] c32 N74-10132
GREENE, W. L.
 Mass measuring system Patent
 [NASA-CASE-XMS-03371] c05 N70-42000
GREENEBERG, J.
 Combined electrolysis device and fuel cell and method of operation Patent
 [NASA-CASE-XLE-01645] c03 N71-20904
 Heat activated cell with alkali anode and alkali salt electrolyte Patent
 [NASA-CASE-LEW-11358] c03 N71-26084
 Heat activated cell Patent
 [NASA-CASE-LEW-11359] c03 N71-28579
 Method of making emf cell
 [NASA-CASE-LEW-11359-2] c03 N72-20034
GREENELBAF, J. E.
 Thermistor holder for skin temperature measurements
 [NASA-CASE-ABC-10855-1] c52 N77-10780
GREENWOOD, T. L.
 Seismic displacement transducer Patent
 [NASA-CASE-IMP-00479] c14 N70-34794
 Condition and condition duration indicator Patent
 [NASA-CASE-IMP-01097] c10 N71-16058
GREGORY, J. W.
 Rocket motor system Patent

[NASA-CASE-XIE-00323]	c28 N70-38505	Tension measurement device Patent	
Combustion chamber Patent		[NASA-CASE-XMS-04545]	c15 N71-22878
[NASA-CASE-XIE-04657]	c28 N71-23968	Winch having cable position and load indicators Patent	
Rocket thrust throttling system		[NASA-CASE-MSC-12052-1]	c15 N71-24599
[NASA-CASE-LEW-10374-1]	c28 N73-13773	GRUBER, C. L.	
GREGORY, I. J.		Method and apparatus for optical modulating a light signal Patent	
Rotating launch device for a remotely piloted aircraft		[NASA-CASE-GSC-10216-1]	c23 N71-26722
[NASA-CASE-ARC-1C979-1]	c09 N77-19076	GRUNBAUM, B. W.	
GRIEVE, S. M.		Automatic multiple-sample applicator and electrophoresis apparatus	
Apparatus for testing wiring harness by vibratic generating means		[NASA-CASE-ARC-10991-1]	c25 N77-12157
[NASA-CASE-MSC-15158-1]	c14 N72-17325	GRUNTHAWER, F. J.	
GRIFFIN, P. D.		Soft X-ray laser using crystal channels as distributed feedback cavities	
Device for determining the accuracy of the flare on a flared tube		[NASA-CASE-NFO-13532-1]	c36 N75-15973
[NASA-CASE-XKS-03495]	c14 N69-39785	Photoelectron spectrometer with means for stabilizing sample surface potential	
Optical monitor panel Patent		[NASA-CASE-NFO-13772-1]	c35 N76-26450
[NASA-CASE-XKS-03509]	c14 N71-23175	GUILLOTTE, B. J.	
GRIFFIN, R. W.		Infrared scanner Patent	
Apparatus for conducting flow electrophoresis in the substantial absence of gravity		[NASA-CASE-XA-00120]	c21 N7C-33181
[NASA-CASE-MFS-21394-1]	c34 N74-27744	GUISINGER, J. E.	
GRIFFIN, W. S.		Starting circuit for vapor lamps and the like Patent	
Fluid jet amplifier		[NASA-CASE-XNP-01058]	c09 N71-12540
[NASA-CASE-XIE-03512]	c12 N69-21466	Variable frequency nuclear magnetic resonance spectrometer Patent	
Fluid jet amplifier Patent		[NASA-CASE-XNP-09830]	c14 N71-26266
[NASA-CASE-XIE-03941]	c12 N71-28741	High voltage transistor amplifier with constant current load	
GRIFFITH, G. E.		[NASA-CASE-NFO-11023]	c09 N72-17155
High intensity heat and light unit Patent		Thermomagnetic recording and magneto-optic playback system having constant intensity laser beam control	
[NASA-CASE-XLA-00141]	c09 N70-33312	[NASA-CASE-NFO-11317-2]	c36 N74-13205
GRINER, D. B.		GUIST, L. B.	
System for the measurement of ultra-low stray light levels		Solid medium thermal engine	
[NASA-CASE-MFS-23513-1]	c74 N77-14842	[NASA-CASE-ARC-10461-1]	c44 N74-33379
GRISAPPE, S. J.		GUNGLE, R. L.	
Method of making a diffusion bonded refractory coating Patent		Self-sealing, unbonded, rocket motor nozzle closure Patent	
[NASA-CASE-XLE-01604-2]	c15 N71-15610	[NASA-CASE-XIA-02651]	c28 N70-41967
Nickel aluminide coated low alloy stainless steel		GUNTER, W. D., JR.	
[NASA-CASE-LEW-11267-1]	c17 N73-32414	Multiple pass reimaging optical system	
Method of protecting the surface of a substrate		[NASA-CASE-ARC-10194-1]	c23 N73-20741
[NASA-CASE-LEW-11696-1]	c37 N75-13261	Dual wavelength scanning Doppler velocimeter	
Duplex aluminized coatings		[NASA-CASE-ARC-10637-1]	c35 N75-16783
[NASA-CASE-LEW-11696-2]	c26 N75-19408	Schlieren system employing antiparallel reflector in the forward direction	
Fused silicide coatings containing discrete particles for protecting niobium alloys		[NASA-CASE-ABC-10971-1]	c09 N76-26224
[NASA-CASE-LEW-11179-1]	c27 N76-16229	Pseudo-backscatter laser Doppler velocimeter employing antiparallel-reflector in the forward direction	
GRISWOLD, R. B., JR.		[NASA-CASE-ABC-10970-1]	c36 N77-25501
Dual output variable pitch turbofan actuation system		GUTLER, C. A.	
[NASA-CASE-LEW-12419-1]	c07 N77-14025	Ablation sensor	
GROBMAN, J.		[NASA-CASE-XLA-01781]	c14 N69-39975
Electric propulsion engine test chamber Patent		Pressurized cell micrometeoroid detector Patent	
[NASA-CASE-XIE-00252]	c11 N70-34844	[NASA-CASE-XLA-00936]	c14 N71-14996
GROON, W. J.		Dual measurement ablation sensor	
Electromagnetic mirror drive system		[NASA-CASE-IAB-10105-1]	c34 N74-15652
[NASA-CASE-XLA-03724]	c14 N69-27461	GUSSOW, S. S.	
Variable pulse width multiplier Patent		Pseudo-noise test set for communication system evaluation	
[NASA-CASE-XLA-02850]	c09 N71-20447	[NASA-CASE-MFS-22671-1]	c35 N75-21582
Annular momentum control device used for stabilization of space vehicles and the like		Method of and means for testing a tape record/playback system	
[NASA-CASE-LAR-11051-1]	c15 N76-14158	[NASA-CASE-MFS-22671-2]	c35 N77-17426
Magnetic suspension and counting system		GUSTAFSON, G. L.	
[NASA-CASE-LAR-11889-1]	c19 N76-18227	Apparatus for measuring thermal conductivity Patent	
GROSE, W. L.		[NASA-CASE-IGS-01052]	c14 N71-15992
Combustion detector		GUTSHALL, R. L.	
[NASA-CASE-LAR-10739-1]	c14 N73-16484	Star scanner	
GROSS, C.		[NASA-CASE-GSC-11569-1]	c89 N74-30886
Method of temperature compensating semiconductor strain gages Patent		GUY, J. T., SR.	
[NASA-CASE-XLA-04555-1]	c14 N71-25892	Disk pack cleaning table Patent Application	
Infrared detectors		[NASA-CASE-IAB-10590-1]	c15 N70-26819
[NASA-CASE-IAB-10728-1]	c14 N73-12445	GEORGAK, C. A.	
GROSS, W. J.		Process for applying a protective coating for salt bath brazing Patent	
Method of fabricating an object with a thin wall having a precisely shaped slit		[NASA-CASE-ILE-00046]	c15 N70-33311
[NASA-CASE-LAR-10409-1]	c31 N74-21059	Protective device for machine and metalworking tools Patent	
GROYE, W. G.		[NASA-CASE-ILE-01092]	c15 N71-22797
Optical inspection apparatus Patent		Extrusion die for refractory metals Patent	
[NASA-CASE-XNF-00462]	c14 N70-34298	[NASA-CASE-ILE-06773]	c15 N71-23817
GROVE, C.			
Lightning current waveform measuring system			
[NASA-CASE-RSC-11018-1]	c33 N77-21320		
GRUBBS, T. M.			
Discrete local altitude sensing device Patent			
[NASA-CASE-XMS-03792]	c14 N70-41812		
Line cutter Patent			
[NASA-CASE-XMS-04072]	c15 N70-42017		

H

HABBAL, W. A.
Analog signal integration and reconstruction system Patent
[NASA-CASE-WFO-10344] c10 N71-26544
System for quantizing graphic displays
[NASA-CASE-WFO-10745] c08 N72-22164

HABRA, J. B.
Multiple varactor frequency doubler Patent
[NASA-CASE-XMP-04956-1] c10 N71-26414

HADER, V.
Apparatus and method for measuring the Seebeck coefficient and resistivity of materials
[NASA-CASE-WFO-11749] c14 N73-28486
Durable antistatic coating for polymethylmethacrylate
[NASA-CASE-WFO-13267-1] c27 N77-22257

HADLAND, W. O.
Control device Patent
[NASA-CASE-XAC-10019] c15 N71-23809
Two degree inverted flexure
[NASA-CASE-ARC-10345-1] c15 N73-12488

HADLEY, B. C., JR.
High field CdS detector for infrared radiation
[NASA-CASE-LAR-11027-1] c35 N74-18088

HADY, W. F.
High speed, self-acting shaft seal
[NASA-CASE-LFW-11274-1] c37 N75-21631
Shaft seal assembly for high speed and high pressure applications
[NASA-CASE-LFW-11873-1] c37 N77-27404

HAEHNER, C. L.
Peen plating
[NASA-CASE-GSC-11163-1] c15 N73-32360
Static coefficient test method and apparatus
[NASA-CASE-GSC-11893-1] c35 N76-31489

HAUSSERMAN, W.
Velocity measurement system
[NASA-CASE-MFS-23363-1] c35 N76-33469

HAFFLE, R. S.
Digital plus analog output encoder
[NASA-CASE-GSC-12115-1] c62 N76-31946

HAGIHARA, P. S.
Frequency to analog converter Patent
[NASA-CASE-XNP-07040] c08 N71-12500

HAGOOD, G. J., JR.
Function generator for synthesizing complex vibration mode patterns
[NASA-CASE-LAR-10310-1] c10 N73-20253

HAINES, B. F.
Visual examination apparatus
[NASA-CASE-ARC-10329-1] c05 N73-26072
Visual examination apparatus
[NASA-CASE-RE-ARC-10329-2] c52 N76-30793
Optical instrument employing reticle having preselected visual response pattern formed thereon
[NASA-CASE-ARC-10976-1] c74 N77-22950

HALEY, C. T.
Clock setter
[NASA-CASE-LPR-11456-1] c35 N76-16392

HALEY, F. C.
Cavity radiometer Patent
[NASA-CASE-XNP-08961] c14 N71-24809

HALL, D. F.
Apparatus for measuring electric field strength on the surface of a model vehicle Patent
[NASA-CASE-XLE-02038] c09 N71-16086

HALL, E. D.
Spectroscopy equipment using a slender cylindrical reflector as a substitute for a slit Patent
[NASA-CASE-XGS-08269] c23 N71-26206

HALL, E. B.
Method for determining presence of OH in magnesium oxide
[NASA-CASE-WFO-10774] c06 N72-17095

HALL, J. B., JR.
Surface roughness detector Patent
[NASA-CASE-XIA-00203] c14 N70-34161
Liquid waste feed system
[NASA-CASE-LAR-10365-1] c05 N72-27102
Automatic liquid inventory collecting and dispensing unit
[NASA-CASE-LAR-11071-1] c35 N75-19611

HALL, J. P., JR.
Illumination system including a virtual light

source Patent
[NASA-CASE-EQH-10781] c23 N71-30292

HALL, J. B.
High powered arc electrodes
[NASA-CASE-LFW-11162-1] c33 N74-12913

HALLAM, K. L.
Image tube
[NASA-CASE-GSC-11602-1] c33 N74-21850

HALLBERG, F. C.
Turn on transient limiter Patent
[NASA-CASE-GSC-10413] c10 N71-26531

HALLOCK, J. B.
Multiple hciogram recording and readout system Patent
[NASA-CASE-ERC-10151] c16 N71-29131

HALPERN, W.
Adjustable chamfering tool
[NASA-CASE-WFO-10857-1] c37 N77-22478

HALPERT, G.
Frangible electrochemical cell
[NASA-CASE-IGS-10010] c03 N72-15986

HABLET, J. P.
Automatic quadrature control and measuring system
[NASA-CASE-MFS-21660-1] c35 N74-21017
LC-oscillator with automatic stabilized amplitude via bias current control
[NASA-CASE-MFS-21698-1] c33 N74-26732

HANNACK, J. B.
Space capsule Patent
[NASA-CASE-XLA-00149] c31 N70-37938
Space capsule Patent
[NASA-CASE-XLA-01332] c31 N71-15664

HANNON, A. D.
Variable sweep aircraft Patent
[NASA-CASE-XLA-03659] c02 N71-11041

HANCHEY, K. K.
Device for preventing high voltage arcing in electron beam welding Patent
[NASA-CASE-XMP-08522] c15 N71-19486

HARD, P. J.
Temperature compensated digital inertial sensor
[NASA-CASE-WFO-13044-1] c35 N74-15094

HANKINSON, T. W. E.
Fatigue-resistant shear pin
[NASA-CASE-XLA-09122] c15 N69-27505

HANNA, M. F.
Dual polarity full wave dc motor drive Patent
[NASA-CASE-XNF-07477] c09 N71-26092
Event sequence detector
[NASA-CASE-WFO-11703-1] c10 N73-32144
High isolation RF signal selection switches
[NASA-CASE-WFO-13081-1] c33 N74-22814

HANSEN, G. H., JR.
Automatic vehicle location system
[NASA-CASE-WFO-11850-1] c32 N74-12512
Vehicle locating system utilizing AM broadcasting station carriers
[NASA-CASE-WFO-13217-1] c32 N75-26194

HANSEN, I. G.
Flow angle sensor and read out system Patent
[NASA-CASE-XLE-04503] c14 N71-24864
Low level signal limiter
[NASA-CASE-XLE-04791] c32 N74-22096
Method of electrically pre-stressing insulation to provide directional increase in dc potential breakdown
[NASA-CASE-LFW-12273-1] c33 N77-17357

HANSEN, S.
Thrust dynamometer Patent
[NASA-CASE-XLE-00702] c14 N70-40203
Method of making screen by casting Patent
[NASA-CASE-XLE-00953] c15 N71-15966
Fluid flow control valve Patent
[NASA-CASE-XLE-00703] c15 N71-15967
Thrust dynamometer Patent
[NASA-CASE-XLE-05260] c14 N71-20429

HANSON, M. P.
Turbo-machine blade vibration damper Patent
[NASA-CASE-XLE-00155] c28 N71-29154

HANSON, P. W.
Lift balancing device
[NASA-CASE-LAR-10348-1] c11 N73-12264

HANSON, R. E.
Tensile strength testing device Patent
[NASA-CASE-XNP-05634] c15 N71-24834
Hydroforming techniques using epoxy molds Patent
[NASA-CASE-XLE-05641-1] c15 N71-26346

HANST, P. L.
Repetitively pulsed, wavelength selective laser

Patent [NASA-CASE-EFC-10178]	c16 N71-24832	Temperature telemetric transmitter Patent [NASA-CASE-NFO-10649]	c07 N71-24840
HAQ, K. E.		HARSTAD, K. G.	
A method for the deposition of beta-silicon carbide by isocapillary [NASA-CASE-EFC-10120]	c26 N69-33482	Isotope separation using metallic vapor lasers [NASA-CASE-NFO-13550-1]	c36 N77-26477
HARATA, Y.		HARTENSTEIN, R. G.	
Method of preparing zinc orthotitanate pigment [NASA-CASE-MFS-23345-1]	c27 N77-30237	Accelerometer with FM output Patent [NASA-CASE-XIA-00492]	c14 N70-34799
HARALSON, H. S.		Variable time constant smoothing circuit Patent [NASA-CASE-XGS-01983]	c10 N70-41964
Ultrasonic scanning system for in-place inspection of brazed tube joints [NASA-CASE-EFC-20767-1]	c38 N74-15130	HARTOP, R. E.	
HARAWAY, W. B., JR.		Reflex feed system for dual frequency antenna [NASA-CASE-NFO-14022-1]	c32 N77-24338
Thermal protection ablation spray system Patent [NASA-CASE-XIA-04251]	c18 N71-26100	HARVEY, G. A.	
Bonding method in the manufacture of continuous regression rate sensor devices [NASA-CASE-LAR-10337-1]	c24 N75-30260	Maksutov spectrograph Patent [NASA-CASE-XIA-10402]	c14 N71-29041
Vacuum pressure molding technique [NASA-CASE-LAR-10073-1]	c37 N76-24575	Apparatus for photographing meteors [NASA-CASE-LAR-10226-1]	c14 N73-19419
HARD, T. M.		HARVEY, W. D.	
Optical systems having spatially invariant outputs [NASA-CASE-EFC-10248]	c14 N72-17323	Heat sensing instrument Patent [NASA-CASE-XIA-01551]	c14 N71-22989
HARDGROVE, W. F.		HARWELL, R. J.	
Omni-directional anisotropic molecular trap Patent [NASA-CASE-XGS-00783]	c30 N71-17788	Nonflammable coating compositions [NASA-CASE-MFS-20486-2]	c27 N74-17283
HARDY, J. C.		HASBACH, W. A.	
Omni-directional joint Patent [NASA-CASE-XMS-09635]	c05 N71-24623	Solid state matrices [NASA-CASE-NFO-10591]	c03 N72-22041
HARMAN, J. M., III		HASKELL, R. E.	
Pulse activated polarographic hydrogen detector Patent [NASA-CASE-XMF-06531]	c14 N71-17575	Optical process for producing classification maps from multispectral data [NASA-CASE-MSC-14472-1]	c43 N77-10584
HARMS, V. W.		An interactive color display for multispectral imagery using correlation clustering [NASA-CASE-MSC-16253-1]	c43 N77-31583
Apparatus for automatically stabilizing the attitude of a nonguided vehicle [NASA-CASE-EFC-10134]	c30 N72-17873	HASSON, D. F.	
HAROUSES, G. G.		Space and atmospheric reentry vehicle Patent [NASA-CASE-XGS-00260]	c31 N70-37924
Method and means for providing an absolute power measurement capability Patent [NASA-CASE-EFC-11020]	c14 N71-26774	HATAKEYAMA, I. F.	
Clear air turbulence detector [NASA-CASE-EFC-10081]	c14 N72-28437	Method and system for ejecting fairing sections from a rocket vehicle [NASA-CASE-GSC-10590-1]	c31 N73-14853
Method and apparatus for measuring solar activity and atmospheric radiation effects [NASA-CASE-EFC-10276]	c14 N73-26432	HATCH, J. E.	
HARPER, C. A.		Energy conversion apparatus Patent [NASA-CASE-XLE-00212]	c03 N70-34134
Thermal conductive connection and method of making same Patent [NASA-CASE-XMS-02087]	c09 N70-41717	HATCHER, M. M.	
HARRAP, V.		Electromagnetic mirror drive system [NASA-CASE-XIA-03724]	c14 N69-27461
Integrated circuit including field effect transistor and ceramic resistor [NASA-CASE-GSC-10835-1]	c09 N72-33205	Infrared scanner Patent [NASA-CASE-XIA-00120]	c21 N70-33181
HARRIGILL, W. I.		Automatic balancing device Patent [NASA-CASE-LAR-10774]	c10 N71-13545
A regulated high efficiency, lightweight capacitor-diode multiplier DC to DC converter [NASA-CASE-LEW-12791-1]	c33 N77-24385	Attitude sensor for space vehicles Patent [NASA-CASE-XIA-00793]	c21 N71-22880
HARRIS, D. M.		HATFIELD, J. J.	
Recorder using selective noise filter [NASA-CASE-EFC-10112]	c07 N72-21119	Integrated time shared instrumentation display Patent [NASA-CASE-XIA-01952]	c08 N71-12507
HARRIS, R. F.		HATHAWAY, M. E.	
Method for fabricating a mass spectrometer inlet leak [NASA-CASE-GSC-12077-1]	c35 N77-24455	Frangible tube energy dissipation Patent [NASA-CASE-XIA-00754]	c15 N70-34850
HARRIS, R. V., JR.		HAUGE, G.	
Supersonic aircraft Patent [NASA-CASE-XLP-04451]	c02 N71-12243	Low distortion automatic phase control circuit [NASA-CASE-MFS-21671-1]	c33 N74-22885
HARRISON, D. E.		HAURY, V. E.	
Transducer circuit and catheter transducer Patent [NASA-CASE-ABC-10132-1]	c09 N71-24597	Hydrazinium nitroformate propellant stabilized with nitroguanidine [NASA-CASE-NFO-12000]	c27 N72-25699
Diode-quad bridge circuit means [NASA-CASE-ABC-10364-2(B)]	c33 N74-14941	Hydrazinium nitroformate propellant with saturated polymeric hydrocarbon binder [NASA-CASE-NFO-12015]	c27 N73-16764
Diode-quad bridge circuit means [NASA-CASE-ABC-10364-3]	c33 N75-19520	HAUSER, J. A.	
Diode-quad bridge circuit means [NASA-CASE-ABC-10364-2]	c33 N75-25041	High pressure gas filter system Patent [NASA-CASE-MFS-12806]	c14 N71-17588
HARRISON, E. S.		High pressure helium purifier Patent [NASA-CASE-XMF-06888]	c15 N71-24044
Polymeric foams from cross-linkable poly-N-arylenebenzimidazoles [NASA-CASE-ABC-11008-1]	c27 N76-28421	HAVENS, D. E.	
HARRISON, F. L.		Meter for use in detecting tension in straps having predetermined elastic characteristics [NASA-CASE-MFS-22189-1]	c35 N75-19615
Life raft stabilizer [NASA-CASE-MSC-12393-1]	c02 N73-26006	HAWKINS, C. A.	
HARRISON, R. G., JR.		System for the measurement of ultra-low stray light levels [NASA-CASE-MFS-23513-1]	c74 N77-14842
Pressure variable capacitor [NASA-CASE-XMF-05752]	c14 N69-21541	HAWLEY, J. J.	
		Method of erasing target material of a vidicon tube or the like Patent [NASA-CASE-XFP-06028]	c09 N71-23189
		HAWLEY, W. W.	
		Omnidirectional acceleration device Patent	

[NASA-CASE-HCN-10780] c14 N71-30265
HAYDEN, R. E.
 Magnetic counter Patent
 [NASA-CASE-HNF-08836] c09 N71-12515
HAYNES, D. F.
 Remote water monitoring system
 [NASA-CASE-LAR-11973-1] c43 N77-28563
HAYNES, J. L.
 Ultrasonic scanning system for in-place
 inspection of brazed tube joints
 [NASA-CASE-MFS-20767-1] c38 N74-15130
HAYNIE, C. C.
 Apparatus for positioning modular components on
 a vertical or overhead surface
 [NASA-CASE-LAR-11465-1] c37 N76-21554
HAYNCS, J. G.
 Interconnection of solar cells Patent
 [NASA-CASE-IGS-01475] c03 N71-11058
 Frangible electrochemical cell
 [NASA-CASE-XGS-10010] c03 N72-15986
HAYS, L. G.
 Fluid phase analyzer Patent
 [NASA-CASE-NFO-10691] c14 N71-26199
 Two phase flow system with discrete impinging
 two-phase jets
 [NASA-CASE-WEC-11556] c12 N72-25292
 Observer window for a gas confining chamber
 [NASA-CASE-NFO-10890] c11 N73-12265
 Flow control valve
 [NASA-CASE-NFO-11951-1] c37 N74-21065
HEARN, C. P.
 Wideband VCO with high phase stability Patent
 [NASA-CASE-XIA-03893] c10 N71-27271
 Multichannel logarithmic RF level detector
 [NASA-CASE-LAR-11021-1] c32 N76-14321
 Phase modulating with odd and even finite power
 series of a modulating signal
 [NASA-CASE-LAR-11607-1] c32 N77-14292
HEBERLIG, J. C.
 Survival couch Patent
 [NASA-CASE-XIA-00118] c05 N70-33285
BECHT, R.
 Apparatus for absolute pressure measurement
 [NASA-CASE-LAR-10000] c14 N73-30394
HECKELMAN, J. D.
 Multialarm summary alarm Patent
 [NASA-CASE-XLE-03061-1] c10 N71-24798
HECKLER, C. E.
 Mercury capillary interrupter Patent
 [NASA-CASE-HNP-02251] c12 N71-20896
 Method for saking conductors for ferrite memory
 arrays
 [NASA-CASE-LAR-10994-1] c24 N75-13032
HEDLUND, R. C.
 Precision rectifier with FET switching means
 Patent
 [NASA-CASE-AEC-10101-1] c09 N71-33109
 Self-tuning bandpass filter
 [NASA-CASE-AEC-10264-1] c09 N73-20231
HEER, E.
 Pressure seal Patent
 [NASA-CASE-NFO-10796] c15 N71-27068
HEFFERNAN, J. I.
 Surface finishing
 [NASA-CASE-HSC-12631-1] c24 N77-28225
 Surface finishing
 [NASA-CASE-HSC-12631-2] c05 N77-31131
HEFLINGER, L. C.
 Spatial filter for Q-switched lasers
 [NASA-CASE-LRW-12164-1] c36 N77-32478
HEIDHANN, E. F.
 Injector for bipropellant rocket engines Patent
 [NASA-CASE-HNF-00148] c28 N70-38710
 Instrument for the quantitative measurement of
 radiation at multiple wave lengths Patent
 [NASA-CASE-XLF-00011] c14 N70-41946
 Control of transverse instability in rocket
 combustors Patent
 [NASA-CASE-XLF-04603] c33 N71-21507
 Burning rate control of solid propellants Patent
 [NASA-CASE-XLF-03494] c27 N71-21819
HEIDI, E. F.
 Ultranstable calibrated light source
 [NASA-CASE-HSC-12293-1] c14 N72-27411
HEISS, W. C.
 Method for molding compounds Patent
 [NASA-CASE-XIA-01091] c15 N71-10672
 Evacuated displacement compression molding
 [NASA-CASE-LAR-10782-1] c31 N74-14133
 Method for compression molding of thermosetting
 plastics utilizing a temperature gradient
 across the plastic to cure the article
 [NASA-CASE-LAR-10489-1] c31 N74-18124
 Method of laminating structural members
 [NASA-CASE-XIA-11028-1] c24 N74-27035
 Molding apparatus
 [NASA-CASE-LAR-10489-2] c31 N74-32920
 Evacuated, displacement compression mold
 [NASA-CASE-LAR-10782-2] c31 N75-13111
 Molded composite pyrogen igniter for rocket motors
 [NASA-CASE-LAR-12018-1] c20 N76-29365
HEINBUCH, A. E.
 Chromato-fluorographic drug detector
 [NASA-CASE-ABC-10633-1] c25 N74-26947
HEIMERL, G. J.
 Extensometer frame
 [NASA-CASE-XLA-10322] c15 N72-17452
HEIN, L. A.
 Spherical bearing
 [NASA-CASE-MFS-23447-1] c37 N77-11403
 Mechanical thermal motor
 [NASA-CASE-MFS-23062-1] c37 N77-12402
HEINDL, J. C.
 Fluid lubricant system Patent
 [NASA-CASE-HNP-03972] c15 N71-23048
HEINERMAN, K.
 Method of forming aperture plate for electron
 microscope
 [NASA-CASE-ARC-10448-2] c74 N75-12732
 Electron microscope aperture system
 [NASA-CASE-ARC-10448-3] c35 N77-14408
HEINRY, O. K.
 Self-obturator, gas operated launcher
 [NASA-CASE-NFO-11013] c11 N72-22247
HEISHAW, R. E.
 Tube dimpling tool Patent
 [NASA-CASE-XMS-06876] c15 N71-21536
HELBERT, W. B., JR.
 Method of repairing discontinuity in fiberglass
 structures
 [NASA-CASE-LAR-10416-1] c24 N74-30001
HELLBAUM, R. F.
 Logic AND gate for fluid circuits Patent
 [NASA-CASE-XLA-07391] c12 N71-17579
 Technique of duplicating fragile core
 [NASA-CASE-XIA-07829] c15 N72-16329
 Fluid pressure amplifier and system
 [NASA-CASE-LAR-10868-1] c33 N74-11050
HELLER, J. A.
 Apparatus and method for reducing thermal stress
 in a turbine rotor
 [NASA-CASE-LEW-12232-1] c07 N77-18160
HELLMANN, R. F.
 Apparatus for purging systems handling toxic,
 corrosive, noxious and other fluids Patent
 [NASA-CASE-XMS-01905] c12 N71-21089
HENDERSON, H. E.
 Gas chromatograph injection system
 [NASA-CASE-ARC-10344-1] c14 N72-21433
 Gas chromatograph injection system
 [NASA-CASE-ARC-10344-2] c35 N75-26334
HENDRICKS, R. D.
 Method of detecting oxygen in a gas
 [NASA-CASE-LAR-10668-1] c06 N73-16106
HENLEY, W. E.
 Method of fabricating an object with a thin wall
 having a precisely shaped slit
 [NASA-CASE-LAR-10409-1] c31 N74-21059
HENNIGAN, T. J.
 Apparatus for measuring swelling characteristics
 of membranes
 [NASA-CASE-IGS-03865] c14 N69-21363
 Prevention of pressure build-up in
 electrochemical cells Patent
 [NASA-CASE-IGS-01419] c03 N70-41864
 Non-magnetic battery case Patent
 [NASA-CASE-IGS-00886] c03 N71-11053
 Method and apparatus for battery charge control
 Patent
 [NASA-CASE-IGS-05432] c03 N71-19438
 Sealing device for an electrochemical cell Patent
 [NASA-CASE-IGS-02630] c03 N71-22974
 Sealed electrochemical cell provided with a
 flexible casing Patent
 [NASA-CASE-IGS-01513] c03 N71-23336
HENRY, A. W.
 Dicyanoacetylene polymers Patent
 [NASA-CASE-HNP-03250] c06 N71-23500

HENRY, B. Z., JR.

Variable geometry manned orbital vehicle Patent
[NASA-CASE-XIA-03691] c31 N71-15674

Variable diledral shuttle orbiter
[NASA-CASE-LAR-10706-2] c05 N77-31132

HENRY, V. F.
Systems and methods for determining radio
frequency interference
[NASA-CASE-GSC-12150-1] c32 N77-12247

HEPPNER, J. F.
Wide range linear fluxgate magnetometer Patent
[NASA-CASE-XGS-01587] c14 N71-15962

HERBELL, F. P.
Gas purged dry box glove Patent
[NASA-CASE-XLE-02531] c05 N71-23080

Method of producing refractory composites
containing tantalum carbide, hafnium carbide,
and hafnium boride Patent
[NASA-CASE-XLE-03940] c18 N71-26153

Refractory metal base alloy composites
[NASA-CASE-XLE-03940-2] c17 N72-28536

HERMAN, C. F.
Differential pulse code modulation
[NASA-CASE-HSC-12506-1] c32 N77-12239

HERMANN, A. H.
Method of using photo voltaic cell using
poly-N-vinylcarbazole complex Patent
[NASA-CASE-HFC-10373] c03 N71-18698

HEROLD, E. P.
Quick attach and release fluid coupling assembly
Patent
[NASA-CASE-XKS-01985] c15 N71-10782

HERB, R. W.
A support technique for vertically oriented
launch vehicles
[NASA-CASE-XIA-02704] c11 N69-21540

HERRMANN, A. I.
Locking device with rolling detents Patent
[NASA-CASE-XMF-01371] c15 N70-41829

HERRICH, B. G.
Power control circuit
[NASA-CASE-XNP-02713] c10 N69-39888

HESPEHIDE, W. H.
Variable direction force coupler
[NASA-CASE-HFS-20317] c15 N73-13463

HESS, R. V.
A technique for breaking ice in the path of a ship
[NASA-CASE-IAR-10815-1] c16 N72-22520

HESS, R. W.
Contour surveying system Patent
[NASA-CASE-XLA-06646] c14 N71-17586

HESTER, E. B.
Current regulating voltage divider
[NASA-CASE-HFS-20935] c09 N71-34212

HETCOAT, J. E.
Thruster maintenance system Patent
[NASA-CASE-HFS-20325] c28 N71-27095

HEWES, D. E.
Rotating space station simulator Patent
[NASA-CASE-XLA-03127] c11 N71-10776

Reduced gravity simulator Patent
[NASA-CASE-XLA-01787] c11 N71-16028

HEYMAN, J. S.
Ultrasonic calibration device
[NASA-CASE-IAR-11435-1] c35 N76-15432

A CW ultrasonic bolt tensioning monitor
[NASA-CASE-IAR-12016-1] c32 N77-15236

HEYSEN, E. C.
Temperature control system with a pulse width
modulated bridge
[NASA-CASE-HFO-11304] c14 N73-26430

HEYSEN, E. H.
Variable geometry wind tunnels
[NASA-CASE-XLA-07430] c11 N72-22246

HIGA, W. E.
Refrigeration apparatus
[NASA-CASE-HFO-10309] c15 N69-23190

Refrigeration apparatus Patent
[NASA-CASE-XNP-08877] c15 N71-23025

Stirling cycle engine and refrigeration systems
[NASA-CASE-HFO-13613-1] c37 N76-29590

HIGBY, R. P.
Electronic background suppression method and
apparatus for a field scanning sensor
[NASA-CASE-XGS-05211] c07 N69-39980

HIGH, R. W.
Meteoroid capture cell construction
[NASA-CASE-HSC-12423-1] c91 N76-30131

HILBERT, E. E.

Data multiplexer using tree switching
configuration
[NASA-CASE-HFO-11333] c08 N72-22162

Flexible computer accessed telemetry
[NASA-CASE-HFO-11358] c07 N72-25172

Space communication system for compressed data
with a concatenated Reed-Solomon-Viterbi
coding channel
[NASA-CASE-NPO-13545-1] c32 N77-12240

HILBORN, E. H.
Method and means for an improved electron beam
scanning system Patent
[NASA-CASE-ERC-10552] c09 N71-12539

Fluidic-thermochromic display device Patent
[NASA-CASE-ERC-10031] c12 N71-18603

Plasma fluidic hybrid display Patent
[NASA-CASE-ERC-10100] c09 N71-33519

HILDBRANDT, A. F.
Helium refining by superfluidity Patent
[NASA-CASE-XNP-00733] c06 N70-34946

Continuous magnetic flux pump
[NASA-CASE-XNF-01187] c15 N73-28516

Superconductive magnetic-field-trapping device
[NASA-CASE-XNP-01185] c26 N73-28710

Magnetic-flux pump
[NASA-CASE-XNP-01188] c15 N73-32361

HILKER, W. R.
Folding structure fabricated of rigid panels
[NASA-CASE-IBQ-02146] c18 N75-27040

HILL, E. K.
Ultrasonic scanner for radial and flat panels
[NASA-CASE-HFS-20335-1] c35 N74-10415

HILL, O. E.
Burst diaphragm flow initiator Patent
[NASA-CASE-HFS-12915] c11 N71-17600

Wind tunnel test section
[NASA-CASE-HFS-20509] c11 N72-17183

HILL, P. R.
Heat protection apparatus Patent
[NASA-CASE-XLA-00892] c33 N71-17897

Kinesthetic control simulator
[NASA-CASE-IAR-10276-1] c09 N75-15662

HILL, W. E.
Sprayable low density ablator
[NASA-CASE-HFS-23506-1] c24 N77-15105

HILLBERG, E. I.
Load relieving device Patent
[NASA-CASE-HMS-06329-1] c15 N71-20441

HILLBORN, E. R.
Color television systems using a single gun
color cathode ray tube Patent
[NASA-CASE-ERC-10098] c09 N71-28618

HILLIS, D. A.
Drift compensation circuit for analog to digital
converter Patent
[NASA-CASE-XNP-04780] c08 N71-19687

HILLMAN, C. E., JR.
Snap-in compressible biomedical electrode
[NASA-CASE-HSC-14623-1] c52 N77-28717

HILTON, G. E.
Position location and data collection system and
method Patent
[NASA-CASE-GSC-10083-1] c30 N71-16090

HINNELIGHT, E. H.
High-temperature, high-pressure spherical
segment valve Patent
[NASA-CASE-IAC-00074] c15 N70-34817

HIRAYANA, C.
Glass-to-metal seals comprising relatively high
expansion metals
[NASA-CASE-LFW-10698-1] c37 N74-21063

HIRSHFIELD, S. H.
Gas liquefaction and dispensing apparatus Patent
[NASA-CASE-HFO-10070] c15 N71-27372

Novel polymers and method of preparing same
[NASA-CASE-HFO-10998-1] c06 N73-32029

HITCHMAN, H. J.
Automatic real-time pair-feeding system for
animals
[NASA-CASE-ABC-10302-1] c51 N74-15778

HOBAIT, R. F.
Liquid flow sight assembly Patent
[NASA-CASE-XLE-02998] c14 N7C-42074

HOBBES, A. J.
Method and apparatus for determining the
contents of contained gas samples
[NASA-CASE-GSC-10903-1] c14 N73-12444

INVENTOR INDEX

HOLT, W. I.

BOBLIN, L. E.
Unfurlable structure including coiled strips
thrust launched upon tension release Patent
[NASA-CASE-BQX-00937] c07 N71-28979

BOCHNAIR, E. S.
Gyrator employing field effect transistors
[NASA-CASE-MFS-21433] c09 N73-20232
Integrated F-channel MCS gyrator
[NASA-CASE-MFS-22343-1] c33 N74-34638
Integrable power gyrator
[NASA-CASE-MFS-22342-1] c33 N75-30428

BODDER, D. T.
Apparatus for remote handling of materials
[NASA-CASE-LAR-10634-1] c37 N74-18123

BODGES, D. H.
Hingeless helicopter rotor with improved stability
[NASA-CASE-ARC-10807-1] c05 N77-17029

HOFFLER, G. W.
Apparatus and method for processing Korotkov
sounds
[NASA-CASE-MSC-13999-1] c52 N74-26626
A logic-controlled occlusive cuff system
[NASA-CASE-MSC-14836-1] c52 N76-27839

HOFFMAN, D. G.
Light detection instrument Patent
[NASA-CASE-IGS-05534] c23 N71-16355

HOFFMAN, E. L.
Flexible fan erectable space structures Patent
[NASA-CASE-XLA-00686] c31 N70-34135

HOFFMAN, H. C.
Gravity gradient attitude control system Patent
[NASA-CASE-GSC-10555-1] c21 N71-27324

HOFFMAN, I. S.
Impact energy absorber Patent
[NASA-CASE-XLA-01530] c14 N71-23092
Self-supporting strain transducer
[NASA-CASE-LAR-11263-1] c35 N75-33369
Miniature biaxial strain transducer
[NASA-CASE-LAR-11648-1] c35 N77-14407

HOFFMAN, L. A.
Compensating bandwidth switching transients in
an amplifier circuit Patent
[NASA-CASE-XMP-01107] c10 N71-28859

HOFFMAN, R. A.
Telemetry processor
[NASA-CASE-GSC-11388-1] c07 N73-24187

HOFFMAN, I. E.
Tunable cavity resonator with ramp shaped supports
[NASA-CASE-BQX-10790-1] c36 N74-11313

HOHL, F.
Volumetric direct nuclear pumped laser
[NASA-CASE-LAR-12183-1] c36 N77-21424

HOKLO, K. B.
Welding blades to rotors
[NASA-CASE-LEW-10533-1] c15 N73-28515

HOLDEN, L. E.
Germanium coated microbridge and method
[NASA-CASE-MFS-23274-1] c76 N76-30084

HOLDEN, G. B.
Balanced bellows spirometer
[NASA-CASE-XAR-01547] c05 N69-21473

HOLDREGE, O. C.
Electric arc driven wind tunnel Patent
[NASA-CASE-XHF-00411] c11 N70-36913

HOLDREN, R. I., III
Radar calibration sphere
[NASA-CASE-XLA-11154] c07 N72-21117

HOLDS, J. K.
Digital second-order phase-locked loop
[NASA-CASE-WFO-11905-1] c33 N74-12887

HOLESKI, D. E.
Apparatus for absorbing and measuring power Patent
[NASA-CASE-XLE-00720] c14 N70-40201

HOLKO, K. B.
Enhanced diffusion welding
[NASA-CASE-LEW-11388-1] c15 N73-32358
Apparatus for welding blades to rotors
[NASA-CASE-LEW-10533-2] c37 N74-11300
Diffusion welding in air
[NASA-CASE-LEW-11387-1] c37 N74-18128
Diffusion welding
[NASA-CASE-LEW-11388-2] c37 N74-21055

HOLLAMAN, J. E.
Protection of moisture sensitive optical
components
[NASA-CASE-ARC-10749-1] c23 N73-32542
Method of preparing water purification membranes
[NASA-CASE-ARC-10643-1] c25 N75-12087

Water purification process
[NASA-CASE-ARC-10643-2] c51 N75-13506
Oxygen post-treatment of plastic surfaces coated
with plasma polymerized silicon-containing
monomers
[NASA-CASE-ARC-10915-2] c27 N77-20256
Abrasion resistant coatings for plastic surfaces
[NASA-CASE-ARC-10915-3] c24 N77-24200

HOLLAND, V. E.
Signal conditioning circuit apparatus
[NASA-CASE-ARC-10348-1] c33 N75-19518

HOLLANDER, J.
Polyurethanes of fluorine containing
polycarbonates
[NASA-CASE-MFS-10512] c06 N73-30099
Highly fluorinated polymers
[NASA-CASE-MFS-11492] c06 N73-30102

HOLLEMAN, E. C.
Three axis controller Patent
[NASA-CASE-XFR-00181] c21 N70-33279

HOLLENBAUGH, E. C.
Position location system and method Patent
[NASA-CASE-GSC-10087-2] c21 N71-13958
Position location and data collection system and
method Patent
[NASA-CASE-GSC-10083-1] c30 N71-16090
Traffic control system and method Patent
[NASA-CASE-GSC-10087-1] c02 N71-19287
Position location system and method
[NASA-CASE-GSC-10087-3] c07 N72-12080
Doppler compensation by shifting transmitted
object frequency within limits
[NASA-CASE-GSC-10087-4] c07 N73-20174

HOLLEY, L. D.
Automatic lightning detection and photographic
system
[NASA-CASE-KSC-10728-1] c14 N73-32319
Microcomputerized electric field meter
diagnostic and calibration system
[NASA-CASE-KSC-11035-1] c33 N77-20343
Digital automatic gain amplifier
[NASA-CASE-KSC-11008-1] c33 N77-21321

HOLLIDAY, H. I.
Precision alignment apparatus for cutting a
workpiece
[NASA-CASE-LAR-11658-1] c37 N77-14478

HOLLIS, B. R., JR.
Multilevel metallization method for fabricating
a metal oxide semiconductor device
[NASA-CASE-MFS-23541-1] c33 N77-27308

HOLMAN, E. V.
Latching mechanism Patent
[NASA-CASE-XMS-03745] c15 N71-21076

HOLMES, B. K.
Inflatable transpiration cooled nozzle
[NASA-CASE-MFS-20619] c28 N72-11708

HOLMES, H. K.
Velocity limiting safety system Patent
[NASA-CASE-XLA-07473] c15 N71-24895

HOLMES, R. F.
Catalyst cartridge for carbon dioxide reduction
unit
[NASA-CASE-LAR-10551-1] c25 N74-12813
Heat exchanger
[NASA-CASE-MFS-22991-1] c34 N77-10463

HOLMES, S. J.
Ultraviolet filter
[NASA-CASE-XMF-02340] c23 N69-24332

HOLMES, T. H.
Vibration damping system Patent
[NASA-CASE-XMS-01620] c23 N71-15673

HOLMES, W. T.
Lifting body Patent Application
[NASA-CASE-FRC-10063] c01 N71-12217

HOLMSTROM, F. E.
Shielded cathode mode bulk effect devices
[NASA-CASE-FRC-10119] c26 N72-21701

HOLT, W. I.
Transient-compensated SCR inverter
[NASA-CASE-XLA-08507] c09 N69-39984
SCR blocking pulse gate amplifier Patent
[NASA-CASE-XLA-07497] c09 N71-12514

HOLT, W. I.
Scan converting video tape recorder
[NASA-CASE-WFO-10166-1] c07 N73-22076
Scan converting video tape recorder
[NASA-CASE-WFO-10166-2] c35 N76-16391
Electromagnetic transducer recording head having
a laminated core section and tapered gap

[NASA-CASE-NEC-10711-1]	c35 N77-21392	[NASA-CASE-IXF-01892]	c10 N71-22986
HOLTZE, R. F.		HOTZ, G. H.	
Coating process		Soil penetrometer	
[NASA-CASE-IXP-06508]	c18 N69-39895	[NASA-CASE-IXP-05530]	c14 N73-32321
HOLWAY, R. F.		Burrowing apparatus	
Model launcher for wind tunnels Patent		[NASA-CASE-IXP-07169]	c15 N73-32362
[NASA-CASE-IXP-03578]	c11 N71-23030	HOUCK, W. H.	
HOMKES, B. J.		Voltage dropout sensor Patent	
Multiparameter vision testing apparatus		[NASA-CASE-NFO-10020]	c10 N71-27338
[NASA-CASE-MSC-13601-2]	c54 N75-27759	Ripple indicator	
HONEY, R. W.		[NASA-CASE-KSC-10162]	c09 N72-11225
Optimum predetection diversity receiving system		Signal conditioner test set	
Patent		[NASA-CASE-KSC-10750-1]	c35 N75-12270
[NASA-CASE-XGS-CC740]	c07 N71-23098	HOUSEMAN, J.	
HONEYCUTT, L., JR.		Hydrogen rich gas generator	
Thermal shock and erosion resistant tantalum		[NASA-CASE-NFO-13342-1]	c37 N76-16446
carbide ceramic material		Hydrogen-rich gas generator	
[NASA-CASE-IAR-11902-1]	c27 N76-23436	[NASA-CASE-NFO-13464-1]	c44 N76-18642
HONG, J. P.		Hydrogen rich gas generator	
Real time analysis of voiced sounds		[NASA-CASE-NFO-13342-2]	c44 N76-29700
[NASA-CASE-NFO-13465-1]	c32 N76-31372	Hydrogen rich gas generator	
HONNELL, M. A.		[NASA-CASE-NFO-13464-2]	c44 N76-29704
Automatic frequency control for FM transmitter		Hydrogen-rich gas generator	
[NASA-CASE-MFS-21540-1]	c32 N74-19790	[NASA-CASE-NFO-13560-1]	c44 N77-10636
Isolated output system for a class D		Combustion engine	
switching-mode amplifier		[NASA-CASE-NFO-13671-1]	c37 N77-31497
[NASA-CASE-MFS-21616-1]	c33 N75-30429	HOWARD, E. A.	
Frequency modulated oscillator		Soil penetrometer	
[NASA-CASE-MFS-22181-1]	c33 N77-17351	[NASA-CASE-IXP-05530]	c14 N75-32321
HOOD, R. T.		Burrowing apparatus	
Hall current measuring apparatus having a series		[NASA-CASE-IXP-07169]	c15 N73-32362
resistor for temperature compensation Patent		HOWARD, F. S.	
[NASA-CASE-IAC-01662]	c14 N71-23037	Geysering inhibitor for vertical cryogenic	
HOOP, J. H.		transfer pipe	
Method and apparatus for nondestructive testing		[NASA-CASE-KSC-10615]	c15 N73-12486
[NASA-CASE-MFS-21233-1]	c38 N74-15395	Floating baffle to improve efficiency of liquid	
Ultrasonic bone densitometer		transfer from tanks	
[NASA-CASE-MFS-20994-1]	c35 N75-12271	[NASA-CASE-KSC-10639]	c15 N73-26472
HOOPER, C. D.		Zero gravity liquid transfer screen	
Extensometer Patent		[NASA-CASE-KSC-10626]	c14 N73-27378
[NASA-CASE-IXF-04680]	c15 N71-19489	HOWARD, J. C.	
HOOPER, E. B.		Means for suppressing or attenuating bending	
Oscillator of multiple plates with axially		motion of elastic bodies Patent	
aligned identical random arrays of apertures		[NASA-CASE-XAC-05632]	c32 N71-23971
[NASA-CASE-MFS-20546-2]	c14 N73-30389	G-load measuring and indicator apparatus	
Automatic lightning detection and photographic		[NASA-CASE-ARC-10806]	c06 N74-27872
system		G-load measuring and indicator apparatus	
[NASA-CASE-KSC-10728-1]	c14 N73-32319	[NASA-CASE-ARC-10806-1]	c35 N75-29381
Three mirror glancing incidence system for X-ray		HOWARD, P. W.	
telescope		Apparatus for reducing aerodynamic noise in a	
[NASA-CASE-MFS-21372-1]	c74 N74-27866	wind tunnel	
Multiplate focusing collimator		[NASA-CASE-MFS-23099-1]	c09 N76-23273
[NASA-CASE-MFS-20932-1]	c35 N75-19616	HOWARD, W. D.	
HOOPER, R. J.		Method and device for detecting voids in low	
Extrusion die for refractory metals Patent		density material Patent	
[NASA-CASE-XLY-06773]	c15 N71-23817	[NASA-CASE-MFS-20044]	c14 N71-28993
HOPKINS, P. H.		HOWARD, W. H.	
Differential phase shift keyed communication		Skeletal stressing method and apparatus Patent	
system		[NASA-CASE-ARC-10100-1]	c05 N71-24738
[NASA-CASE-MSC-14065-1]	c32 N74-26654	Programmable physiological infusion	
Differential phase shift keyed signal resolver		[NASA-CASE-ARC-10447-1]	c52 N74-22771
[NASA-CASE-MSC-14066-1]	c33 N74-27705	Tread drum for animals	
HOPKINS, V.		[NASA-CASE-ARC-10917-1]	c37 N76-20485
Inorganic solid film lubricants Patent		HOWARTH, J. T.	
[NASA-CASE-IXF-03988]	c15 N71-21403	Non-flammable elastomeric fiber from a	
HOPPING, R. L.		fluorinated elastomer and containing an	
Landing gear Patent		halogenated flame retardant	
[NASA-CASE-IXF-01174]	c02 N70-41589	[NASA-CASE-MSC-14331-1]	c27 N76-24405
HORNE, W. B.		Flame retardant elastomeric compositions	
Aircraft wheel spray drag alleviator Patent		[NASA-CASE-MSC-14331-2]	c27 N76-24408
[NASA-CASE-XLA-01583]	c02 N70-36825	Flame retardant elastomeric compositions	
HORNE, J. L.		[NASA-CASE-MSC-14331-3]	c27 N76-24409
Photographic film restoration system		HOWE, T. L.	
[NASA-CASE-MSC-12448-1]	c14 N72-20394	Strain gauge ambiguity sensor for segmented	
Optical noise suppression device and method		mirror active optical system	
[NASA-CASE-MSC-12640-1]	c74 N76-31998	[NASA-CASE-MFS-20506-1]	c35 N75-12273
HORTON, D. B.		HOWELL, J. E.	
Instrument support with precise lateral		Device for directionally controlling	
adjustment Patent		electromagnetic radiation Patent	
[NASA-CASE-IXF-00480]	c14 N70-39898	[NASA-CASE-XLE-01716]	c09 N70-40234
HORTON, J. C.		HOWELL, W. E.	
Method of making impurity-type semiconductor		Fringe counter for interferometers Patent	
electrical contacts Patent		[NASA-CASE-LAB-10204]	c14 N71-27215
[NASA-CASE-IXF-01016]	c26 N71-17818	Star image motion compensator	
HORTON, R. L.		[NASA-CASE-LAB-10523-1]	c14 N72-22444
Method and apparatus for mapping planets		HOWLAND, B. T.	
[NASA-CASE-NFO-11001]	c07 N72-21118	High pressure air valve Patent	
HOSETHORN, B. H.		[NASA-CASE-MSC-11010]	c15 N71-19485
Adaptive tracking notch filter system Patent			

HOYT, R. F.
In situ transfer standard for ultrahigh vacuum
gage calibration
[NASA-CASE-IAR-10862-1] c35 N74-15092

HRACE, P. J.
Capacitor and method of making same Patent
[NASA-CASE-LFW-10364-1] c09 N71-13522

HROB, R. L.
Load current sensor for a series pulse width
modulated power supply
[NASA-CASE-GSC-10656-1] c09 N72-25249

HROBT, R. J.
Microwave flow detector Patent
[NASA-CASE-ARC-10009-1] c15 N71-17822

Transient video signal recording with expanded
playback Patent
[NASA-CASE-ARC-10003-1] c09 N71-25866

Method and apparatus for swept-frequency
impedance measurements of welds
[NASA-CASE-ARC-10176-1] c15 N72-21464

Coaxial inverted geometry transistor having
buried emitter
[NASA-CASE-ARC-10230-1] c09 N73-32112

Twin-capacitive shaft angle encoder with analog
output signal
[NASA-CASE-ARC-10897-1] c33 N77-31404

HRYNIEWICKI, E.
Vehicle for use in planetary exploration
[NASA-CASE-NFO-11366] c11 N73-26238

HSU, G. C.
Aldehyde-containing urea-adsorbing polysaccharides
[NASA-CASE-NFO-13620-1] c27 N77-30236

HSU, L. C.
Catalytic trimerization of aromatic nitriles and
triaryl-s-triazine ring cross-linked high
temperature resistant polymers and copolymers
made thereby
[NASA-CASE-LFW-12053-1] c27 N74-34579

Catalytic trimerization of aromatic nitriles and
triaryl-s-triazine ring cross-linked high
temperature resistant polymers and copolymers
made thereby
[NASA-CASE-LFW-12053-2] c23 N77-32244

HSU, Y.-Y.
Slug flow magnetohydrodynamic generator
[NASA-CASE-XLF-02083] c03 N69-39983

HUBBARD, W. P.
Digital demodulator-correlator
[NASA-CASE-NFO-13982-1] c32 N77-24341

HUBER, C. S.
Modification of the physical properties of
freeze-dried rice
[NASA-CASE-MSC-13540-1] c05 N72-33096

HUBER, W. C.
Hand-held self-maneuvering unit Patent
[NASA-CASE-XMS-05304] c05 N71-12336

Inflatable tether Patent
[NASA-CASE-XMS-10993] c15 N71-28936

Foldable construction block
[NASA-CASE-MSC-12233-1] c15 N72-25454

Foldable construction block
[NASA-CASE-MSC-12233-2] c32 N73-13921

Fluid valve assembly
[NASA-CASE-MSC-12731-1] c37 N76-26511

HUDIS, M.
Preparation of dielectric coatings of variable
dielectric constant by plasma polymerization
[NASA-CASE-ARC-10892-2] c27 N77-17245

HUDOCK, R. J.
Reference apparatus for medical ultrasonic
transducer
[NASA-CASE-ARC-10753-1] c54 N75-27760

HUDSON, O. K.
Gravimeter Patent
[NASA-CASE-XMF-05844] c14 N71-17587

HUDSPETH, I.
Phase demodulation system with two phase locked
loops Patent
[NASA-CASE-XMF-00777] c10 N71-19469

HUELSMAN, L. E.
AC networks and amplifiers employing the same
[NASA-CASE-IAC-05462-2] c10 N72-17171

HUFF, R. G.
Apparatus for sensing temperature
[NASA-CASE-XLF-05230] c14 N72-27410

Method of making apparatus for sensing temperature
[NASA-CASE-XLF-05230-2] c14 N73-13417

Jet exhaust noise suppressor
[NASA-CASE-LFW-11286-1] c07 N74-27490

HUFFAKER, R. M.
Laser Doppler system for measuring three
dimensional vector velocity Patent
[NASA-CASE-MFS-20386] c21 N71-19212

Clear air turbulence detector
[NASA-CASE-MFS-21244-1] c36 N75-15028

Focused laser Doppler velocimeter
[NASA-CASE-MFS-23178-1] c35 N77-10493

Wind measurement system
[NASA-CASE-MFS-23362-1] c47 N77-10753

HUGGINS, C. T.
Solid state television camera system Patent
[NASA-CASE-XMF-06092] c07 N71-24612

HUGHES, B. C.
Air bearing Patent
[NASA-CASE-XMF-00339] c15 N70-39896

HUGHES, D. B.
Fast scan control for deflection type mass
spectrometers
[NASA-CASE-IAR-10766-1] c14 N72-21432

Fast scan control for deflection type mass
spectrometers
[NASA-CASE-IAR-11428-1] c35 N74-34857

HUGHES, F. M.
Meteoroid detector
[NASA-CASE-IAR-10483-1] c14 N73-32327

HUMBERT, J. E.
Automatic real-time pair-feeding system for
animals
[NASA-CASE-ARC-10302-1] c51 N74-15778

HUMENIK, P. M.
Gas turbine combustor Patent
[NASA-CASE-LFW-10286-1] c28 N71-28915

HUMES, D. E.
Impact measuring technique
[NASA-CASE-IAR-10913] c14 N72-16282

HUMMER, R. F.
Camera arrangement
[NASA-CASE-GSC-12032-2] c35 N76-19408

HUMPHREY, B.
Process for purification of waste water produced
by a Kraft process pulp and paper mill
[NASA-CASE-NFO-13847-2] c85 N77-17949

HUNGERFORD, W. J.
Conforming polisher for aspheric surface of
revolution Patent
[NASA-CASE-XGS-02884] c15 N71-22705

HUNKLER, R. E.
Foamed in place ceramic refractory insulating
material Patent
[NASA-CASE-XGS-02435] c18 N71-22998

HUNT, G. B.
System for the measurement of ultra-low stray
light levels
[NASA-CASE-MFS-23513-1] c74 N77-14842

HUNT, J. G.
Extrusion can
[NASA-CASE-NFO-10812] c15 N73-13464

HUNT, S. B., JR.
Multiparameter vision testing apparatus
[NASA-CASE-MSC-13601-2] c54 N75-27759

HUNTER, R. E.
Method and apparatus for neutralizing potentials
induced on spacecraft surfaces
[NASA-CASE-GSC-11963-1] c33 N77-10429

HUNTERSS, W. I.
Ion and electron detector for use in an ICR
spectrometer
[NASA-CASE-NFO-13479-1] c35 N77-10492

HORD, W. A.
System for the measurement of ultra-low stray
light levels
[NASA-CASE-MFS-23513-1] c74 N77-14842

HORD, W. J.
Digital filter for reducing sampling jitter in
digital control systems Patent
[NASA-CASE-NFO-11088] c08 N71-29034

Transition tracking bit synchronization system
[NASA-CASE-NFO-10844] c07 N72-20140

Digital quasi-exponential function generator
[NASA-CASE-NFO-11130] c08 N72-20176

Code regenerative clean-up loop transponder for
a nu-type ranging system
[NASA-CASE-NFO-11707] c07 N73-25161

HORST, W. W.
A logic-controlled occlusive cuff system
[NASA-CASE-MSC-14836-1] c52 N76-27839

BUSAIN-ABIDI, A. S.
Optical data processing using paraboloidal

mirror segments
 [NASA-CASE-GSC-11296-1] c23 N73-30666
 BUSCHKE, E. G., JR.
 Method of joining aluminum to stainless steel
 Patent
 [NASA-CASE-MFS-07369] c15 N71-20443
 Brazing alloy composition
 [NASA-CASE-MNF-06053] c26 N75-27126
 Brazing alloy
 [NASA-CASE-MNF-03878] c26 N75-27127
 HUSHANN, O. K.
 Multilayer porous ionizer Patent
 [NASA-CASE-MNF-04338] c17 N71-23046
 HUSSEY, M. W.
 Filter regeneration systems
 [NASA-CASE-MSC-14273-1] c34 N75-33342
 HUTCHINSON, W. D.
 Manually actuated heat pump
 [NASA-CASE-MFO-10677] c05 N72-11084
 HUTCHISON, J. J.
 Trifunctional alcohol
 [NASA-CASE-MFO-10714] c06 N69-31244
 Novel polycarboxylic prepolymeric materials and
 polymers thereof Patent
 [NASA-CASE-MFO-10596] c06 N71-25929
 HUTTO, R. J.
 Radiation sensitive solid state switch
 [NASA-CASE-MFC-10817-1] c08 N73-30135
 HYBER, R. L.
 Audio signal processor Patent
 [NASA-CASE-MSC-12223-1] c07 N71-26181

I-LECHAO, J.
 Locking mechanism for orthopedic braces
 [NASA-CASE-GSC-12082-1] c54 N76-22914
 IANNINI, A. A.
 Pressure sensitive transducers Patent
 [NASA-CASE-ERC-10087] c14 N71-27334
 Semiconductor transducer device
 [NASA-CASE-ERC-10087-2] c14 N72-31446
 ICELAND, W. F.
 Grain refiner control in TIG arc welding
 [NASA-CASE-MSC-19095-1] c37 N75-19683
 IDEN, R. B.
 Method for determining presence of OH in
 magnesium oxide
 [NASA-CASE-MFO-10774] c06 N72-17095
 IGENBERGS, E. B.
 Self-energized plasma compressor
 [NASA-CASE-MFS-22145-1] c75 N75-13625
 Two stage light gas-plasma projectile accelerator
 [NASA-CASE-MFS-22287-1] c75 N76-14931
 Self-energized plasma compressor
 [NASA-CASE-MFS-22145-2] c75 N76-17951
 IGOE, W. B.
 Dynamic vibration absorber Patent
 [NASA-CASE-IAR-10083-1] c15 N71-27006
 ILES, P. A.
 Method for producing a solar cell having an
 integral protective covering
 [NASA-CASE-IGS-04531] c03 N69-24267
 Method of coating solar cell with borosilicate
 glass and resultant product
 [NASA-CASE-GSC-11514-1] c03 N72-24037
 ILLG, W.
 Hydraulic grip Patent
 [NASA-CASE-XLA-05100] c15 N71-17696
 Light shield and infrared reflector for fatigue
 testing Patent
 [NASA-CASE-XLA-01782] c14 N71-26136
 INBOLDI, E.
 Tracking receiver Patent
 [NASA-CASE-IGS-06679] c10 N71-21473
 INIG, L. A.
 Anti-buckling fatigue test assembly
 [NASA-CASE-LAR-10426-1] c09 N74-19528
 INLAY, E. B.
 Binary to binary-coded-decimal converter Patent
 [NASA-CASE-MNF-00432] c08 N70-35423
 INGEBO, B. D.
 Splash groove fuel injector
 [NASA-CASE-LFW-12417-1] c07 N76-22198
 INGHAM, J. D.
 Dual membrane, hollow fiber fuel cell
 [NASA-CASE-MFO-13732-1] c44 N77-19581
 INGHAM, K. T.
 Locking device for turbine rotor blades Patent

[NASA-CASE-MNF-00816] c28 N71-28928
 IRICK, S. C.
 Ejectable underwater sound source recovery
 assembly
 [NASA-CASE-LAR-10595-1] c35 N74-16135
 IRONS, A. S.
 Heat sterilizable patient ventilator
 [NASA-CASE-MFO-13313-1] c54 N75-27761
 IRWIN, A. S.
 Drilled ball bearing with a one piece
 anti-tipping cage assembly
 [NASA-CASE-LFW-11925-1] c37 N75-31446
 IRWIN, K. S.
 Controlled visibility device for an aircraft
 Patent
 [NASA-CASE-MNF-04147] c11 N71-10748
 IRWIN, T. F.
 Leading edge protection for composite blades
 [NASA-CASE-LFW-12550-1] c24 N77-19170
 ISLEY, W. C.
 Heated porous plug microthruster
 [NASA-CASE-GSC-10640-1] c28 N72-18766
 IVES, R. B.
 Computerized system for translating a torch head
 [NASA-CASE-MFS-23620-1] c37 N77-24497
 IWASAKI, N.
 Control device Patent
 [NASA-CASE-IAC-10019] c15 N71-23809

J

JACK, J. B.
 Electro-thermal rocket Patent
 [NASA-CASE-XLE-00267] c28 N70-33356
 Electothermal rockets having improved heat
 exchangers Patent
 [NASA-CASE-XLE-01783] c28 N70-34175
 JACKSON, C. B., JR.
 Wind tunnel model and method
 [NASA-CASE-LAR-10812-1] c09 N74-17955
 JACKSON, K. B.
 Optical alignment system Patent
 [NASA-CASE-MNF-02029] c14 N70-41955
 JACKSON, L. B.
 Techniques for insulating cryogenic fuel
 containers Patent
 [NASA-CASE-XLA-01967] c31 N70-42015
 Structural panel
 [NASA-CASE-IAR-11052-1] c32 N73-13929
 JACKSON, M. B.
 Directionally solidified eutectic gamma plus
 beta nickel-base superalloys
 [NASA-CASE-LFW-12906-1] c26 N77-32279
 JACOB, D. S.
 Pressure modulating valve
 [NASA-CASE-MSC-14905-1] c37 N77-28487
 JACOBS, I. B.
 Data compression system
 [NASA-CASE-MNF-09785] c08 N65-21928
 JACOBS, R. B.
 Densitometer Patent
 [NASA-CASE-XLE-00688] c14 N70-41330
 JACOBSON, D. S.
 Hermetically sealed semiconductor
 [NASA-CASE-GSC-10791-1] c15 N73-14469
 JAGOW, R. B.
 A process of forming catalytic surfaces for
 oxidation reactions
 [NASA-CASE-MSC-14831-1] c25 N76-23387
 JAIN, A.
 Surface roughness measuring system
 [NASA-CASE-MFO-13862-1] c32 N77-17325
 JAKSTYS, V. J.
 Composite antenna feed
 [NASA-CASE-GSC-11046-1] c07 N73-28013
 JALINEK, A., JR.
 Method for improving the signal-to-noise ratio
 of the Wheatstone bridge type bolometer Patent
 [NASA-CASE-XLA-02810] c14 N71-25901
 Infrared horizon locator
 [NASA-CASE-LAR-10726-1] c14 N73-20475
 JALOPKA, M. W.
 Volumetric direct nuclear pumped laser
 [NASA-CASE-IAR-12183-1] c36 N77-21424
 JAMES, L. W.
 III-V photocathode with nitrogen doping for
 increased quantum efficiency
 [NASA-CASE-MFO-12134-1] c33 N76-31409

JAMES, H. J.
Resilient wheel Patent
[NASA-CASE-MFS-13929] c15 N71-27091

JAMIESON, J. B., JR.
Optical rotational sensor
[NASA-CASE-KSC-10752-1] c15 N73-27407

JANISON, H. B.
Ion-exchange membrane with platinum electrode
assembly Patent
[NASA-CASE-XMS-02063] c03 N71-29044

JANOFF, W.
Tracking receiver Patent
[NASA-CASE-IGS-08679] c10 N71-21473

JANKOWSKI, P.
Quick disconnect filter coupling
[NASA-CASE-MFS-22323-1] c37 N76-14463

JANNICH, P. J., JR.
Passive synchronized spike generator with high
input impedance and low output impedance and
capacitor power supply Patent
[NASA-CASE-IGS-03632] c09 N71-23311

JAVAN, A.
Method and apparatus for stabilizing a gaseous
optical maser Patent
[NASA-CASE-IGS-03644] c16 N71-18614

JEAHE, H. L.
Priority interrupt system
[NASA-CASE-MFO-13167-1] c60 N76-18800

JECH, R. W.
Reinforced metallic composites Patent
[NASA-CASE-XLF-02428] c17 N70-33288
Method of making fiber reinforced metallic
composites Patent
[NASA-CASE-XLF-00231] c17 N70-38198
Reinforced metallic composites Patent
[NASA-CASE-XLF-00228] c17 N70-38490
Method for producing fiber reinforced metallic
composites Patent
[NASA-CASE-XLF-03925] c18 N71-22894

JEDLIKA, J. E.
Solid medium thermal engine
[NASA-CASE-ARC-10461-1] c44 N74-33379

JEFFREYS, B. E.
Focused laser Doppler velocimeter
[NASA-CASE-MFS-23178-1] c35 N77-10493

JELLIAN, A. V.
Clear air turbulence detector
[NASA-CASE-MFS-21244-1] c36 N75-15028
Focused laser Doppler velocimeter
[NASA-CASE-MFS-23178-1] c35 N77-10493

JELLISON, J. C.
Resilience testing device Patent
[NASA-CASE-XLA-08254] c14 N71-26161

JENKINS, K. B.
Diode and protection fuse unit Patent
[NASA-CASE-XKS-03381] c09 N71-22796

JENKINS, L. B.
Indexed keyed connection Patent
[NASA-CASE-XMS-02532] c15 N70-41808

JENKINS, H. K.
Thermally conductive polymers
[NASA-CASE-GSC-11304-1] c06 N72-21105

JENSEN, A. E.
Separation nut Patent
[NASA-CASE-IGS-01971] c15 N71-15922

JENSEN, C. A.
Continuous plasma light source
[NASA-CASE-XMP-04167-2] c25 N72-24753
Continuous plasma laser
[NASA-CASE-XMP-04167-3] c36 N77-19416

JENSEN, K. J.
Failure sensing and protection circuit for
converter networks Patent
[NASA-CASE-GSC-10114-1] c10 N71-27366

JENSEN, P. A.
Low noise single aperture multimode monopulse
antenna feed system Patent
[NASA-CASE-XMP-01735] c07 N71-22750

JENSEN, R. B.
Improved solar heating system
[NASA-CASE-LAR-12009-1] c44 N76-32649

JEPFENSEN, G. L.
Deployable flexible tunnel
[NASA-CASE-MFS-22636-1] c37 N76-22540

JESSOP, A. D.
Variable angle tube holder
[NASA-CASE-LAR-10507-1] c11 N72-25284
Lyophilized spike dispenser
[NASA-CASE-LAR-10544-1] c37 N74-13178

JETER, J. D.
Flammability test chamber Patent
[NASA-CASE-KSC-10126] c11 N71-24985

JEWELL, P. A.
Data handling system based on source
significance, storage availability and data
received from the source Patent Application
[NASA-CASE-XMP-04162-1] c08 N70-34675

JEWELL, R. A.
Production of high purity silicon carbide Patent
[NASA-CASE-XLA-00158] c26 N70-36805
Apparatus for producing high purity silicon
carbide crystals Patent
[NASA-CASE-XLA-02057] c26 N70-40015
Method of coating carbonaceous base to prevent
oxidation destruction and coated base Patent
[NASA-CASE-XLA-00284] c15 N71-16075
Method of coating carbonaceous base to prevent
oxidation destruction and coated base Patent
[NASA-CASE-XLA-00302] c15 N71-16077

JEX, D. W.
Liquid aerosol dispenser
[NASA-CASE-MFS-20829] c12 N72-21310
Two stage light gas-plasma projectile accelerator
[NASA-CASE-MFS-22287-1] c75 N76-14931

JHABVALA, B. D.
A complementary DMOS-V MOS integrated circuit
structure
[NASA-CASE-GSC-12190-1] c33 N77-29403

JOBSON, D. J.
Spectrometer integrated with a facsimile camera
[NASA-CASE-LAR-11207-1] c35 N75-19613

JOHANSEN, K.
Systems and methods for determining radio
frequency interference
[NASA-CASE-GSC-12150-1] c32 N77-12247

JOHANSEN, D. L.
Articulated multiple couch assembly Patent
[NASA-CASE-MSC-11253] c05 N71-12343
Collapsible Apollo couch
[NASA-CASE-MSC-13140] c05 N72-11085

JOHNS, C. E.
Continuously variable voltage controlled phase
shifter
[NASA-CASE-MFO-11129] c09 N72-33204

JOHNSON, E. G.
System and method for tracking a signal source
[NASA-CASE-MCM-10880-1] c32 N75-30385

JOHNSON, A. L., JR.
Microelectronic module package Patent
[NASA-CASE-XMS-02182] c10 N71-28783

JOHNSON, C. B.
Hypersonic test facility Patent
[NASA-CASE-XLA-00378] c11 N71-15925
Hypersonic test facility Patent
[NASA-CASE-XLA-05378] c11 N71-21475
Image tube
[NASA-CASE-GSC-11602-1] c33 N74-21850

JOHNSON, C. C.
Visual target for retrofire attitude control
[NASA-CASE-XMS-12158-1] c31 N69-27499
Orbital escape device Patent
[NASA-CASE-XMS-06162] c31 N71-28851
Stand-off type ablative heat shield
[NASA-CASE-MSC-12143-1] c33 N72-17947
Amplitude steered array
[NASA-CASE-GSC-11446-1] c33 N74-20860
A reverse osmosis membrane of high urea
rejection properties
[NASA-CASE-ARC-10980-1] c27 N77-18265

JOHNSON, C. C., JR.
Space capsule Patent
[NASA-CASE-XLA-00149] c31 N70-37938
Space capsule Patent
[NASA-CASE-XLA-01332] c31 N71-15664

JOHNSON, C. E.
Impact testing machine Patent
[NASA-CASE-XMP-04817] c14 N71-23225

JOHNSON, C. L.
Holding process for imidazopyrrolone polymers
[NASA-CASE-LAR-10547-1] c31 N74-13177

JOHNSON, C. W.
Method of resolving clock synchronization error
and means therefor Patent
[NASA-CASE-XMP-08875] c10 N71-23099

JOHNSON, E. T.
Automated clinical system for chromosome analysis
[NASA-CASE-MFO-13913-1] c52 N77-19750

JOHNSON, P. W.
Heat conductive resiliently compressible structure for space electronics package modules Patent
[NASA-CASE-MSC-12389] c33 N71-29052

JOHNSON, R. G.
Electronic checkout system for space vehicles Patent
[NASA-CASE-XKS-08012-2] c31 N71-15566

JOHNSON, H. I.
Training vehicle for controlling attitude Patent
[NASA-CASE-XMS-02977] c11 N71-10746
Gravity stabilized flying vehicle Patent
[NASA-CASE-MSC-12111-1] c02 N71-11039
Hand-held self-maneuvering unit Patent
[NASA-CASE-XMS-05304] c05 N71-12336
Fluid power transmission Patent
[NASA-CASE-XMS-01445] c12 N71-16031
Subgravity simulator Patent
[NASA-CASE-XMS-04798] c11 N71-21474
Pneumatic amplifier Patent
[NASA-CASE-MSC-12121-1] c15 N71-27147

JOHNSON, J. C., JR.
Mechanical actuator Patent
[NASA-CASE-XGS-04548] c15 N71-24045

JOHNSON, J. L., JR.
Quiet jet transport aircraft
[NASA-CASE-LAR-11087-1] c02 N73-26008
High lift aircraft
[NASA-CASE-LAR-11252-1] c05 N75-25914

JOHNSON, K. G.
Positioning mechanism
[NASA-CASE-NPO-1C679] c15 N72-21462

JOHNSON, L. E.
Extreme temperature thermal control coating
[NASA-CASE-LAR-11756-1] c24 N76-26284

JOHNSON, R. C.
Enthalpy and stagnation temperature determination of a high temperature laminar flow gas stream Patent
[NASA-CASE-XLE-00266] c14 N70-34156

JOHNSON, R. F.
Acquisition and tracking system for optical radar
[NASA-CASE-MFS-20125] c16 N72-13437

JOHNSON, R. L.
Gas lubricant compositions Patent
[NASA-CASE-XLE-00353] c18 N70-39897
Metallic film diffusion for boundary lubrication Patent
[NASA-CASE-XLE-01765] c18 N71-10772
Alloys for bearings Patent
[NASA-CASE-XLE-05033] c15 N71-23810
Metallic film diffusion for boundary lubrication Patent
[NASA-CASE-XLE-10337] c15 N71-24046

JOHNSON, W. E., JR.
Hydrofoil Patent
[NASA-CASE-XLA-00229] c12 N70-33305

JOHNSON, A. E.
Polarimeter for transient measurement Patent
[NASA-CASE-XNP-08883] c23 N71-16101
Light direction sensor
[NASA-CASE-NFO-11201] c14 N72-27409
Cooperative multi-axis sensor for teleoperation of article manipulating apparatus
[NASA-CASE-NFO-13386-1] c54 N75-27758
Stark-effect modulation of CO₂ laser with NH₂D
[NASA-CASE-NFO-11945-1] c36 N76-18427

JOHNSTON, J. D.
Wrist joint assembly
[NASA-CASE-MFS-23311-1] c37 N76-28554
Combined docking and grasping device
[NASA-CASE-MFS-23088-1] c37 N77-23483
Apparatus for assembling space structure
[NASA-CASE-MFS-23579-1] c12 N77-31213

JOHNSTON, J. E.
Electrostatic measurement system
[NASA-CASE-MFS-22129-1] c33 N75-18477

JOHNSTON, R. L.
Multiple environment materials test chamber having a multiple port X-ray tube for irradiating a plurality of samples Patent
[NASA-CASE-XMS-C2930] c11 N71-23042

JOHNSTON, R. S.
Shock absorbing support and restraint means Patent
[NASA-CASE-XMS-01240] c05 N70-35152
Fabric for micrometeoroid protection garment Patent
[NASA-CASE-MSC-12109] c18 N71-26285

JOHNSTON, W. V.
Heat flow calorimeter
[NASA-CASE-GSC-11434-1] c34 N74-27859

JOLLEY, J.
Lightweight reflector assembly
[NASA-CASE-NFO-13707-1] c74 N77-28933

JONES, J. C.
Shock absorber Patent
[NASA-CASE-XMS-03722] c15 N71-21530

JONES, J. F.
Reinforced structural plastics
[NASA-CASE-LEW-10199-1] c27 N74-23125

JONES, J. H.
Lightning tracking system
[NASA-CASE-KSC-10729-1] c09 N75-32110
Lightning current measuring systems
[NASA-CASE-KSC-10807-1] c33 N75-26246

JONES, J. L.
Multiple circuit switch apparatus with improved pivot actuator structure Patent
[NASA-CASE-XAC-03777] c10 N71-15909
Stereoscopic television system and apparatus
[NASA-CASE-ARC-10160-1] c23 N72-27728

JONES, R. A.
Flow field simulation Patent
[NASA-CASE-LAR-11138] c12 N71-20436
Method for determining thermo-physical properties of specimens
[NASA-CASE-LAR-11053-1] c25 N74-18551
Auxiliary power system for activity cooled aircraft
[NASA-CASE-LAR-11626-1] c34 N77-12332
Apparatus for determining thermophysical properties of test specimens
[NASA-CASE-LAR-11883-1] c09 N77-27131

JONES, R. E.
Swirl can primary combustor
[NASA-CASE-LEW-11326-1] c23 N75-30665

JONES, R. B.
Apparatus for establishing flow of a fluid mass having a known velocity
[NASA-CASE-MFS-21424-1] c34 N74-27730

JONES, R. J.
Capillary flow weld-bonding
[NASA-CASE-LAR-11726-1] c37 N76-27568

JONES, R. L.
Helmet assembly and latch means therefor Patent
[NASA-CASE-XMS-04935] c05 N71-11190

JONES, R. I.
Dual-fuselage aircraft having yawable wing and horizontal stabilizer
[NASA-CASE-ARC-10470-1] c02 N73-26005
Oblique-wing supersonic aircraft
[NASA-CASE-ARC-10470-3] c05 N76-29217

JONES, W. C.
Rotational joint assembly for the prosthetic leg
[NASA-CASE-KSC-11004-1] c54 N77-30749

JONES, W. P.
Folded traveling wave maser structure Patent
[NASA-CASE-XNP-05219] c16 N71-15550
Superconducting magnet Patent
[NASA-CASE-XNP-06503] c23 N71-29049

JORDAN, A. W.
Electric storage battery
[NASA-CASE-NFO-11021] c03 N72-20032

JORDON, W. J.
Inspection gage for boss Patent
[NASA-CASE-XNP-04966] c14 N71-17658

JOSIAS, C. S.
Micro current measuring device using plural logarithmic response heated filamentary type diodes Patent
[NASA-CASE-XNP-00384] c09 N71-13530

JOSLYN, A. W.
Boiler for generating high quality vapor Patent
[NASA-CASE-XLE-00785] c33 N71-16104

JOYNER, U. T.
Nose gear steering system for vehicle with main skids Patent
[NASA-CASE-XLA-01804] c02 N70-34160

JUDD, B. W.
Garments for controlling the temperature of the body Patent
[NASA-CASE-XMS-10269] c05 N71-24147

JUDD, J. H.
Air frame drag balance Patent
[NASA-CASE-XLA-00113] c14 N70-33386
Spacecraft airlock Patent
[NASA-CASE-XLA-02050] c31 N71-22968

Light regulator
[NASA-CASE-LAR-10836-1] c26 N72-27784
Deposition apparatus
[NASA-CASE-LAR-10541-1] c15 N72-32487
JUDY, P. F.
Method and system for in vivo measurement of
bone tissue using a two level energy source
[NASA-CASE-MSC-14276-1] c52 N77-14737
JUREGENSEN, K.
Regenerative braking system Patent
[NASA-CASE-IMP-01096] c10 N71-16030
JUHASY, A. J.
Controlled separation combustor
[NASA-CASE-LEW-11593-1] c20 N76-14190
JURSCAGA, G. M.
Method of fabricating an article with cavities
[NASA-CASE-LAR-10318-1] c31 N74-18089
JUVINALL, G. I.
Trialkyl-dihalotantalum and niobium compounds
Patent
[NASA-CASE-IMP-04023] c06 N71-28808

K

KALFAYAN, S. B.
Epoxy-aziridine polymer product Patent
[NASA-CASE-NFO-10701] c06 N71-28620
Strain gage mounting assembly
[NASA-CASE-NFO-13170-1] c35 N76-14430
KALKREUTH, E. W.
Heat transfer device
[NASA-CASE-NFO-11120-1] c34 N74-18552
KALLINS, C.
Rotary actuator
[NASA-CASE-NFO-10244] c15 N72-26371
KAHL, S.
Gas regulator Patent
[NASA-CASE-NFO-10298] c12 N71-17661
KAMINSKAS, R. A.
Penetrating radiation system for detecting the
amount of liquid in a tank Patent
[NASA-CASE-MSC-12280] c27 N71-16348
KAMMERMEYER, K.
Mixture separation cell Patent
[NASA-CASE-XNS-02552] c18 N71-20742
KAMPINSKY, A.
Method and apparatus for determining
electromagnetic characteristics of large
surface area passive reflectors Patent
[NASA-CASE-IGS-02608] c07 N70-41678
Apparatus providing a directive field pattern
and attitude sensing of a spin stabilized
satellite Patent
[NASA-CASE-IGS-02607] c31 N71-23009
KANE, T. B.
Spacecraft attitude control method and apparatus
[NASA-CASE-HCN-10439] c21 N72-21624
KAPUSTKA, R. E.
Method and apparatus for reconditioning
nickel-cadmium batteries
[NASA-CASE-MFS-23270-1] c44 N77-12511
KARIGAN, G. B.
Accumulator
[NASA-CASE-MFS-19287-1] c34 N77-30399
KARIOTIS, A. B.
Compression test assembly
[NASA-CASE-LAR-10440-1] c14 N73-32323
KARSE, I.
Tape guidance system and apparatus for the
provision thereof Patent
[NASA-CASE-IMP-09453] c08 N71-19420
Incremental tape recorder and data rate
converter Patent
[NASA-CASE-IMP-02778] c08 N71-22710
KASPARBECK, W. E.
Precision stepping drive Patent
[NASA-CASE-MFS-14772] c15 N71-17692
Fine adjustment mount
[NASA-CASE-MFS-20249] c15 N72-11386
Adjustable force probe
[NASA-CASE-MFS-20766] c14 N72-33377
KAST, H. B.
Oil cooling system for a gas turbine engine
[NASA-CASE-LEW-12830-1] c07 N77-23106
KASTAN, B.
Absorptive splitter for closely spaced
supersonic engine air inlets Patent
[NASA-CASE-XLA-02865] c28 N71-15563

KATOW, E. S.
Multi-feed cone Cassegrain antenna Patent
[NASA-CASE-NFO-10539] c07 N71-11285
KATVALA, V. E.
Reaction cured glass and glass coatings
[NASA-CASE-ABC-11051-1] c27 N77-10201
KATZ, L.
Force measuring instrument Patent
[NASA-CASE-IMP-00456] c14 N70-34705
Optimum predetection diversity receiving system
Patent
[NASA-CASE-XGS-00740] c07 N71-23098
Apparatus for obtaining isotropic irradiation of
a specimen
[NASA-CASE-MFS-20095] c24 N72-11595
KATZ, W. H.
Temperature reducing coating for metals subject
to flame exposure Patent
[NASA-CASE-XLE-00035] c33 N71-29151
KATZBERG, S. J.
Automatic focus control for facsimile cameras
[NASA-CASE-LAR-11213-1] c35 N75-15014
Spectrometer integrated with a facsimile camera
[NASA-CASE-LAR-11207-1] c35 N75-19614
Device for measuring the contour of a surface
[NASA-CASE-LAR-11869-1] c35 N77-10497
KATZEN, E. D.
Protected isotope heat source
[NASA-CASE-LEW-11227-1] c73 N75-30876
KATZIN, L.
Breakaway connector
[NASA-CASE-NFO-11140] c15 N72-17455
KAUFMAN, H. R.
Ion thruster cathode
[NASA-CASE-XLE-07087] c06 N69-39889
Ion rocket Patent
[NASA-CASE-XLE-00376] c28 N70-37245
Electrostatic ion engine having a permanent
magnetic circuit Patent
[NASA-CASE-XLE-01124] c28 N71-14043
Electrostatic ion rocket engine Patent
[NASA-CASE-XLE-02066] c28 N71-15661
Ion beam deflector Patent
[NASA-CASE-LEW-10689-1] c28 N71-26173
KAUFMAN, J. W.
Anemometers (peak wind speed anemometers)
[NASA-CASE-MFS-20916] c14 N73-25460
KAUFMAN, W. B.
High current electrical lead
[NASA-CASE-LEW-10950-1] c33 N74-27683
KAUFMAN, J. J.
Lead-oxygen dc power supply system having a
closed loop oxygen and water system
[NASA-CASE-MFS-23059-1] c44 N76-27664
KAZABOFF, J. B.
A heat exchanger and method of making
[NASA-CASE-LEW-12441-1] c34 N75-19580
KAZNOFF, A. I.
Method of making a cermet Patent
[NASA-CASE-LEW-10219-1] c18 N71-28729
KAZOKAS, G. P.
Vacuum leak detector
[NASA-CASE-LAR-11237-1] c35 N75-19612
KEAPER, L. S., JR.
Transmitting and reflecting diffuser
[NASA-CASE-LAR-10385-3] c23 N73-32538
Transmitting and reflecting diffuser
[NASA-CASE-LAR-10385-2] c70 N74-13436
KEARNS, W. J.
Mount for thermal control system Patent
[NASA-CASE-NFO-10138] c33 N71-16357
KEATHLEY, W. B.
Energy absorbing structure Patent Application
[NASA-CASE-MSC-12279-1] c15 N70-35679
Low onset rate energy absorber
[NASA-CASE-MSC-12279] c15 N72-17450
KEATING, J. H.
Method and apparatus for attaching physiological
monitoring electrodes Patent
[NASA-CASE-IMP-07658-1] c05 N71-26293
KEEFER, J. B.
Phonocardiogram simulator Patent
[NASA-CASE-IKS-10804] c05 N71-24606
KEENE, W. H.
Clear air turbulence detector
[NASA-CASE-MFS-21244-1] c36 N75-15028
Focused laser Doppler velocimeter
[NASA-CASE-MFS-23178-1] c35 N77-10493

KEHLET, A. B.
Parachute glider Patent
[NASA-CASE-XIA-00898] c02 N70-36804
Space and atmospheric reentry vehicle Patent
[NASA-CASE-XGS-00260] c31 N70-37924
Space capsule Patent
[NASA-CASE-XIA-00149] c31 N70-37938
Space capsule Patent
[NASA-CASE-XIA-01332] c31 N71-15664

KELBAUGH, B. M.
Automatic instrument for chemical processing to
detect microorganism in biological samples by
measuring light reactions
[NASA-CASE-GSC-11169-2] c05 N73-32011

KELLER, E. E.
Heat exchanger
[NASA-CASE-MFS-22991-1] c34 N77-10463

KELLER, G. C.
Plural beam antenna
[NASA-CASE-GSC-11013-1] c09 N73-19234

KELLER, O. F.
Pressure regulating system Patent
[NASA-CASE-XNF-00450] c15 N70-38603

KELLEY, J. B.
Mechanical stability augmentation system Patent
[NASA-CASE-XIA-06339] c02 N71-13422

KELLS, M. C.
Device for measuring pressure Patent
[NASA-CASE-XAC-04458] c14 N71-24232

KELLY, D. L.
Multistage aerospace craft
[NASA-CASE-XNF-02263] c05 N74-10907

KELLY, W. I., IV
Spectrometer integrated with a facsimile camera
[NASA-CASE-LAF-11207-1] c35 N75-19613

KELSEY, E. L.
Transient-compensated SCR inverter
[NASA-CASE-XIA-085C7] c09 N69-39984
SCR blocking pulse gate amplifier Patent
[NASA-CASE-XIA-07497] c09 N71-12514

KEMP, K. L.
Pneumatic mirror support system
[NASA-CASE-XIA-03271] c11 N69-24321

KEMP, R. F.
Method and apparatus for measuring potentials in
plasmas Patent
[NASA-CASE-XIE-00821] c25 N71-15650
Apparatus for field strength measurement of a
space vehicle Patent
[NASA-CASE-XIE-00820] c14 N71-16014

KEMP, R. H.
Thin-walled pressure vessel Patent
[NASA-CASE-XIE-04677] c15 N71-10577

KENDALL, J. M., SR.
Conically shaped cavity radiometer with a dual
purpose cone winding Patent
[NASA-CASE-XNP-05701] c14 N71-26475
Black body cavity radiometer Patent
[NASA-CASE-NFC-10810] c14 N71-27323

KENDRICK, W. F.
Ablative resin Patent
[NASA-CASE-XLE-05913] c33 N71-14032
Reinforced structural plastics
[NASA-CASE-LIW-10199-1] c27 N74-23125

KENNEDY, B. W.
Electrical connector Patent Application
[NASA-CASE-MFS-14741] c09 N70-20737
Filter system for control of outgas
contamination in vacuum Patent
[NASA-CASE-MFS-14711] c15 N71-26185
Method of making shielded flat cable Patent
[NASA-CASE-MFS-13687] c09 N71-28691
Shielded flat cable
[NASA-CASE-MFS-13687-2] c09 N72-22198
Polyimide resin-fiberglass cloth laminates for
printed circuit boards
[NASA-CASE-MFS-20408] c18 N73-12604
Integrated circuit package with lead
structure and method of preparing the same
[NASA-CASE-MFS-21374-1] c33 N74-12951

KENNEDY, A. J., III
Space suit
[NASA-CASE-MSC-12609-1] c05 N73-32012

KENNEDY, B. L.
Geneva mechanism
[NASA-CASE-NFC-13281-1] c37 N75-13266

KENT, W. D.
Heat sterilizable patient ventilator
[NASA-CASE-NFO-13313-1] c54 N75-27761

KENYON, G. C.
Flight craft Patent
[NASA-CASE-XAC-02058] c02 N71-16087

KEPLER, C. E.
Tertiary flow injection thrust vectoring system
Patent
[NASA-CASE-MFS-20831] c28 N71-29153

KERLEY, J. J., JR.
Apparatus for vibrational testing of articles
[NASA-CASE-GSC-11302-1] c14 N73-13416

KERN, C. V.
Deformable vehicle wheel Patent
[NASA-CASE-MFS-20400] c31 N71-18611

KERN, J. D.
Magnetic recording head and method of making
same Patent
[NASA-CASE-GSC-10097-1] c08 N71-27210

KERNODLE, B. E.
Inherent redundancy electric heater
[NASA-CASE-MFS-21462-1] c33 N74-14935

KERN, J. H.
Traffic survey system
[NASA-CASE-MFS-22631-1] c66 N76-19888

KERSEY, E. D., JR.
Angular displacement indicating gas bearing
support system Patent
[NASA-CASE-XIA-09346] c15 N71-28740

KERSLAKE, W. E.
Ion thruster cathode
[NASA-CASE-XIE-07087] c06 N69-39889
Electronic cathode having a brush-like structure
and a relatively thick oxide emissive coating
Patent
[NASA-CASE-XLE-04501] c09 N71-23190

KERSTEN, L.
Wrist joint assembly
[NASA-CASE-MFS-23311-1] c37 N76-28554

KERVIN, W. J.
Nonmagnetic thermal motor for a magnetometer
[NASA-CASE-XAB-03786] c09 N69-21313
Demodulation system Patent
[NASA-CASE-XAC-04030] c10 N71-19472
Transducer circuit and catheter transducer Patent
[NASA-CASE-ARC-10132-1] c09 N71-24597
Active RC networks
[NASA-CASE-ARC-10042-2] c10 N72-11256
RC networks and amplifiers employing the same
[NASA-CASE-XAC-05462-2] c10 N72-17171
Active RC networks
[NASA-CASE-ARC-10020] c10 N72-17172
Multiloop RC active filter apparatus having low
parameter sensitivity with low amplifier gain
[NASA-CASE-ARC-10192] c09 N72-21245
Integrated structure vacuum tube
[NASA-CASE-ARC-10445-1] c31 N76-31365

KESSEL, J. E.
Plural recorder system
[NASA-CASE-XMS-06949] c09 N69-21467

KESSINGER, R. L.
Hearing aid malfunction detection system
[NASA-CASE-MSC-14916-1] c33 N77-13335

KEY, C. F.
Nonflammable coating compositions
[NASA-CASE-MFS-20486-2] c27 N74-17283

KEYNTON, E. J.
Technique for control of free-flight rocket
vehicles Patent
[NASA-CASE-XIA-00937] c31 N71-17691

KHANNA, S. M.
Direct current transformer
[NASA-CASE-MFS-23659-1] c33 N77-20341

KIBBE, R. K.
Load cell protection device Patent
[NASA-CASE-XMS-06782] c32 N71-15974

KICKER, E. A.
Inrush current limiter
[NASA-CASE-GSC-11789-1] c33 N77-14333

KIEFER, P. J., JR.
Thermal conductive connection and method of
making same Patent
[NASA-CASE-XMS-02087] c09 N70-41717

KIKIN, G. B.
Multiducted electromagnetic pump Patent
[NASA-CASE-NFO-10755] c15 N71-27084
Shell side liquid metal boiler
[NASA-CASE-NFO-10831] c33 N72-20915

KILLALBA, W. F.
Clamping assembly for inertial components Patent
[NASA-CASE-XMS-02184] c15 N71-20813

KIM, C.
Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] c52 N74-27566

KIM, H. H.
A multichannel photoionization chamber for
absorption analysis Patent
[NASA-CASE-PRC-10044-1] c14 N71-27090

KIMBALL, R. E.
Apparatus for remote handling of materials
[NASA-CASE-LAR-10634-1] c37 N74-18123

KIMBARD, W. H.
Particle detection apparatus Patent
[NASA-CASE-XIA-00135] c14 N70-33322
Gas actuated belt disconnect Patent
[NASA-CASE-XIA-00326] c03 N70-34667
Micrometeoroid velocity measuring device Patent
[NASA-CASE-XIA-00495] c14 N70-41332
Micrometeoroid penetration measuring device Patent
[NASA-CASE-XIA-00941] c14 N71-23240
Deployable pressurized cell structure for a
micrometeoroid detector
[NASA-CASE-IAR-10295-1] c35 N74-21062
Particulate and aerosol detector
[NASA-CASE-LAR-11434-1] c35 N76-22509

KIMBELL, D. K.
Four phase logic systems
[NASA-CASE-MSC-14240-1] c33 N75-14957

KING, C. B.
Method of obtaining permanent record of surface
flow phenomena Patent
[NASA-CASE-XIA-01353] c14 N70-41366
Method and apparatus for bonding a plastics
sleeve onto a metallic body Patent
[NASA-CASE-XIA-01262] c15 N71-21404
Dielectric molding apparatus Patent
[NASA-CASE-LAR-10121-1] c15 N71-26721

KING, H. J.
Gas regulator Patent
[NASA-CASE-WFO-10298] c12 N71-17661

KING, H. M.
Method of making impurity-type semiconductor
electrical contacts Patent
[NASA-CASE-XMF-01016] c26 N71-17818
Sprayable low density ablators
[NASA-CASE-MFS-23506-1] c24 N77-15105

KING, R. B.
Preparation of high purity copper fluoride
[NASA-CASE-LFW-10794-1] c06 N72-17093

KING, R. P.
Anthropomorphic master/slave manipulator system
[NASA-CASE-PRC-10756-1] c54 N77-32721

KING, R. W.
Method and apparatus for making a heat
insulating and ablative structure Patent
[NASA-CASE-XMS-02009] c33 N71-20834

KING, W. L.
Gregorian all-reflective optical system
[NASA-CASE-GSC-12058-1] c74 N77-26942

KIRKBY, J. P.
Data transfer system Patent
[NASA-CASE-WFO-12107] c08 N71-27255

KIRNABD, K. P.
Laser Doppler system for measuring three
dimensional vector velocity Patent
[NASA-CASE-MFS-20386] c21 N71-19212

KINO, G. S.
Traveling wave solid state amplifier utilizing a
semiconductor with negative differential
mobility
[NASA-CASE-BQN-10069] c33 N75-27251

KINSELE, E. C.
Signal multiplexer
[NASA-CASE-XGS-01110] c07 N69-24334

KINZLER, J. A.
Emergency escape system Patent
[NASA-CASE-MSC-12086-1] c05 N71-12345
Surface finishing
[NASA-CASE-MSC-12631-1] c24 N77-28225
Surface finishing
[NASA-CASE-MSC-12631-2] c05 N77-31131

KIRBY, C. A.
Translatory shock absorber for attitude sensors
[NASA-CASE-MFS-22905-1] c19 N76-22284

KIRCHMAN, R. J.
Accelerometer with FM output Patent
[NASA-CASE-XIA-00492] c14 N70-34799

KIRSTEN, C. C.
Solar-powered pump
[NASA-CASE-WFO-13567-1] c44 N76-29701

KIS, G.
Optical alignment system Patent
[NASA-CASE-XNF-02029] c14 N70-41955

KISSEL, R. B.
Tetherline system for orbiting satellites
[NASA-CASE-MFS-23564-1] c13 N77-11079

KISSELL, R. B.
Rateometer
[NASA-CASE-MFS-20418] c14 N73-24473

KISZKO, W.
Portable superclean air column device Patent
[NASA-CASE-XMF-03212] c15 N71-22721

KITTS, W. T.
Cryogenic connector for vacuum use Patent
[NASA-CASE-XGS-02441] c15 N70-41629

KLECHKE, E. W.
Nickel aluminide coated low alloy stainless steel
[NASA-CASE-LEW-11267-1] c17 N73-32414

KLEIN, E. L.
Apparatus for inspecting microfilm Patent
[NASA-CASE-MFS-20240] c14 N71-26788

KLEIN, H. G.
Electrolytically regenerative hydrogen-oxygen
fuel cell Patent
[NASA-CASE-XIR-04526] c03 N71-11052

KLEINBERG, L. L.
Stable amplifier having a stable quiescent point
Patent
[NASA-CASE-XGS-02812] c09 N71-19466
Complementary regenerative switch Patent
[NASA-CASE-XGS-02751] c09 N71-23015
Monostable multivibrator
[NASA-CASE-GSC-10082-1] c10 N72-20221
Active tuned circuit
[NASA-CASE-GSC-11340-1] c10 N72-33230
Ultra-stable oscillator with complementary
transistors
[NASA-CASE-GSC-11513-1] c33 N74-20862

KLEINROCK, L.
Data compression system
[NASA-CASE-XNF-09785] c08 N69-21928
Method and apparatus for data compression by a
decreasing slope threshold test
[NASA-CASE-WFO-10769] c08 N72-11171

KLINA, S. J.
High temperature cobalt-base alloy Patent
[NASA-CASE-XLE-00726] c17 N71-15644

KLINER, A. J.
Capacitance multiplier and filter synthesizing
network
[NASA-CASE-WFO-11948-1] c33 N74-32712

KLINER, A. J., JR.
Automatic frequency discriminators and control
for a phase-lock loop providing frequency
preset capabilities Patent
[NASA-CASE-XMF-08665] c10 N71-19467

KLINGMAN, E. E., III
Apparatus for calibrating an image dissector tube
[NASA-CASE-MFS-22208-1] c33 N75-26244
Electronic optical transfer function
analyzer
[NASA-CASE-MFS-21672-1] c74 N76-19935

KLISCH, J. A.
Combustion products generating and metering device
[NASA-CASE-GSC-11095-1] c14 N72-10375

KLOC, I.
Penetrometer
[NASA-CASE-WFO-11103-1] c35 N77-27367

KNAUER, W.
Ion thruster
[NASA-CASE-LEW-10770-1] c28 N72-22770

KNECHTEL, E. D.
Two force component measuring device Patent
[NASA-CASE-XAC-04886-1] c14 N71-20439
Floating two force component measuring device
Patent
[NASA-CASE-XAC-04885] c14 N71-23790

KROBLL, A. C.
Graphite reinforced bone cement
[NASA-CASE-WFO-13764-1] c24 N76-26281
An improved vehicular impact absorption system
[NASA-CASE-WFO-14014-1] c37 N77-31501

KMOOS, S. P.
Shock tube bypass piston tunnel
[NASA-CASE-WFO-12109] c11 N72-22245

KOBAYASHI, H. S.
Pulse code modulated signal synchronizer
[NASA-CASE-MSC-12462-1] c32 N74-20809
Pulse code modulated signal synchronizer
[NASA-CASE-MSC-12494-1] c32 N74-20810

Receiving and tracking phase modulated signals
[NASA-CASE-MSC-16170-1] c32 N77-12248

Bit error rate measurement above and below bit
rate tracking threshold
[NASA-CASE-MSC-12743-1] c32 N77-19290

KOCH, R. P.
Expulsion bladder-equipped storage tank
structure Patent
[NASA-CASE-INP-00612] c11 N70-38182

Combined pressure regulator and shutoff valve
[NASA-CASE-NFC-13201-1] c37 N75-15050

KOCH, K. P.
CRT blanking and brightness control circuit
[NASA-CASE-RSC-10647-1] c10 N72-31273

KOCZELA, L. J.
Adaptive vectoring computer system
[NASA-CASE-MSC-13932-1] c62 N74-14920

KODIS, R. D.
Clear air turbulence detector
[NASA-CASE-EFC-10081] c14 N72-28437

KOJIMA, G. K.
A miniature implantable ultrasonic echosonometer
[NASA-CASE-ARC-11035-1] c52 N77-15621

KOLBIY, R. B.
High power microwave power divider Patent
[NASA-CASE-NFO-11031] c07 N71-33606

System for controlling the operation of a
variable signal device
[NASA-CASE-NFC-11064] c07 N72-11150

KOLBY, R. E.
Direct reading inductance meter
[NASA-CASE-NFC-13792-1] c35 N77-32455

KOLOBOFF, G. J.
Amplitude steered array
[NASA-CASE-GSC-11446-1] c33 N74-20860

KOLSTREE, H. B.
Radiator deployment actuator Patent
[NASA-CASE-MSC-11817-1] c15 N71-26611

KONIGSBERG, E.
Accelerometer telemetry system
[NASA-CASE-ARC-10849-1] c17 N76-29347

KOPPELSON, S.
Rate augmented digital to analog converter Patent
[NASA-CASE-XIA-07828] c08 N71-27057

KOPEISHI, F. J.
Ring counter
[NASA-CASE-XGS-03095] c09 N69-27463

KOPIA, L. P.
Transmitting and reflecting diffuser
[NASA-CASE-LAR-10385-3] c23 N73-32538

Transmitting and reflecting diffuser
[NASA-CASE-LAR-10385-2] c70 N74-13436

KORABOWSKI, J. J.
Pressure garment joint Patent
[NASA-CASE-XMS-09636] c05 N71-12344

Method of forming a root cord restrained
convolute section
[NASA-CASE-MSC-12398] c05 N72-20098

KORDIS, E. E.
High intensity heat and light unit Patent
[NASA-CASE-XIA-00141] c09 N70-33312

KORSCH, D.
Three-mirror telescope
[NASA-CASE-MFS-23675-1] c74 N77-28937

KORVIN, W.
Self-erecting reflector Patent
[NASA-CASE-XGS-09190] c31 N71-16102

Tracking antenna system Patent
[NASA-CASE-GSC-10553-1] c07 N71-19854

Antenna array at focal plane of reflector with
coupling network for beam switching Patent
[NASA-CASE-GSC-10220-1] c07 N71-27233

KOSCHNEIDER, L. A.
Bi-polar phase detector and corrector for split
phase PCM data signals Patent
[NASA-CASE-XGS-01590] c07 N71-12392

KOSHAKI, E. G.
Linear magnetic brake with two windings Patent
[NASA-CASE-XIF-05679] c15 N71-17652

Electrostatic collector for charged particles
[NASA-CASE-XFW-11192-1] c09 N73-13208

Electron beam controller
[NASA-CASE-LPW-11617-1] c33 N74-10195

KOSHIO, J. J.
Extravehicular tunnel suit system Patent
[NASA-CASE-MSC-12243-1] c05 N71-24728

KOUIDES, D. A.
Low density bismaleimide-carbon microballoon
composites
[NASA-CASE-ARC-11040-1] c24 N77-19173

KOVELL, S. P.
Method for etching copper Patent
[NASA-CASE-XGS-06306] c17 N71-16044

KOYBAYASHI, H. S.
Unbalanced quadriphase demodulator
[NASA-CASE-MSC-14840-1] c32 N77-24331

KOZIOL, J. S., JR.
Aircraft control system
[NASA-CASE-EFC-10439] c02 N73-19004

KRAMER, F.
Device for suppressing sound and heat produced
by high-velocity exhaust jets Patent
[NASA-CASE-INP-01813] c28 N70-41582

KRAMER, J. S.
Apparatus for determining thermophysical
properties of test specimens
[NASA-CASE-LAR-11883-1] c09 N77-27131

KRAMER, E.
Electronic amplifier with power supply switching
Patent
[NASA-CASE-XMS-00945] c09 N71-10798

Power supply Patent
[NASA-CASE-XMS-02159] c10 N71-22961

KRAUSE, F. E.
Passive optical wind and turbulence detection
system Patent
[NASA-CASE-INP-14032] c20 N71-16340

KRAUSE, I. A.
Satellite interlace synchronization system
[NASA-CASE-GSC-10390-1] c07 N72-11149

KRAUSE, L. M.
Enthalpy and stagnation temperature
determination of a high temperature laminar
flow gas stream Patent
[NASA-CASE-XIF-00266] c14 N70-34156

Sensing probe
[NASA-CASE-LEW-10281-1] c14 N72-17327

KRAUSE, M. C.
Focused laser Doppler velocimeter
[NASA-CASE-MFS-23178-1] c35 N77-10493

Wind measurement system
[NASA-CASE-MFS-23362-1] c47 N77-10753

KRAUSE, S. J.
Method and device for determining battery state
of charge Patent
[NASA-CASE-NFO-10194] c03 N71-20407

KRAUSHAR, W. L.
Coaxial anode wire for gas radiation counters
[NASA-CASE-GSC-11492-1] c35 N74-26949

KREISHAW, W. S.
Inflation system for balloon type satellites
Patent
[NASA-CASE-XGS-03351] c31 N71-16081

KRIEVE, W. P.
High-voltage cable Patent
[NASA-CASE-INP-00738] c09 N70-38201

KROPP, C. J.
Determination of spot weld quality Patent
[NASA-CASE-INP-02588] c15 N71-18613

KRSEN, A., JR.
Optical torqueometer Patent
[NASA-CASE-XIF-00503] c14 N70-34818

KRUPNICK, A. C.
Method for detecting hydrogen gas
[NASA-CASE-INP-03873] c06 N69-39733

Inorganic thermal control coatings
[NASA-CASE-MFS-20011] c18 N72-22566

Nonflammable coating compositions
[NASA-CASE-MFS-20486-2] c27 N74-17283

Aluminum or copper substrate panel for selective
absorption of solar energy and the method of
producing said panel
[NASA-CASE-MFS-23518-1] c44 N77-31610

Stainless steel panel for selective absorption
of solar energy and the method of producing
said panel
[NASA-CASE-MFS-23518-2] c44 N77-31611

KUBACKI, R. M.
Boron trifluoride coatings for thermoplastic
materials
[NASA-CASE-ARC-11057-1] c27 N77-26308

KUBICA, A. J.
Decomposition unit Patent
[NASA-CASE-XMS-00583] c28 N70-38504

KUBICK, A. P.
Signal path series step biased multidevice high
efficiency amplifier Patent
[NASA-CASE-GSC-10668-1] c07 N71-28430

Power responsive overload sensing circuit Patent
[NASA-CASE-GSC-10667-1] c10 N71-33129

Infinite range electronics gain control circuit
[NASA-CASE-GSC-10786-1] c10 N72-28241

KUBIK, C. F.
Method and construction for protecting heat sensitive bodies from thermal radiation and convective heat Patent
[NASA-CASE-XHP-01310] c33 N71-28852

KUBIK, J. S.
Device for preventing high voltage arcing in electron beam welding Patent
[NASA-CASE-XHP-06522] c15 N71-19486

KUBOKAWA, C. C.
Fastener apparatus Patent
[NASA-CASE-ARC-10140-1] c15 N71-17653

KUEBLER, M. E.
Method and means for damping nutation in a satellite Patent
[NASA-CASE-XHP-00442] c31 N71-10747

KUEHLY, J. D.
Low thrust monopropellant engine
[NASA-CASE-GSC-12194-1] c20 N77-28219

KUGATH, D. A.
Remote manipulator system
[NASA-CASE-MFS-22022-1] c37 N76-15460

KUHN, R. E.
Quiet jet transport aircraft
[NASA-CASE-LAR-11087-1] c02 N73-26008

KUHN, R. F., JR.
Universal restrainer and joint Patent
[NASA-CASE-XNP-02278] c15 N71-28951

Internally supported flexible duct joint
[NASA-CASE-MFS-19193-1] c37 N75-19686

KUHNS, P. W.
Generator for a space power system Patent
[NASA-CASE-XIE-04250] c09 N71-20446

KUPPERMAN, J. E., JR.
Low friction magnetic recording tape Patent
[NASA-CASE-XGS-00373] c23 N71-15978

KURAL, M. B.
Strain arrestor plate for fused silica tile
[NASA-CASE-MSC-14182-1] c27 N76-14264

KURIGER, W. I.
Short range laser obstacle detector
[NASA-CASE-NFO-11856-1] c36 N74-15145

KURPLE, W.
Bit error rate measurement above and below bit rate tracking threshold
[NASA-CASE-MSC-12743-1] c32 N77-19290

KURTZ, R. L.
Hybrid holographic system using reflected and transmitted object beams simultaneously Patent
[NASA-CASE-MFS-20074] c16 N71-15565

Multiple image storing system for high speed projectile holography
[NASA-CASE-MFS-20596] c14 N72-17324

Real time moving scene holographic camera system
[NASA-CASE-MFS-21087-1] c35 N74-17153

Holographic system for nondestructive testing
[NASA-CASE-MFS-21704-1] c35 N75-25124

Real time, large volume, moving scene holographic camera system
[NASA-CASE-MFS-22537-1] c35 N75-27328

Projection system for display of parallax and perspective
[NASA-CASE-MFS-23194-1] c74 N76-13909

Holographic motion picture camera with Doppler shift compensation
[NASA-CASE-MFS-22517-1] c35 N76-18402

Hybrid holographic non-destructive test system
[NASA-CASE-MFS-23114-1] c35 N76-24529

KURVIN, C. W.
Remote platform power conserving system
[NASA-CASE-GSC-11182-1] c15 N75-13007

KURYLO, M. J., III
Ultraviolet atomic emission detector
[NASA-CASE-ECN-10756-1] c14 N72-25428

KURZBALS, P. B.
Spacecraft experiment pointing and attitude control system Patent
[NASA-CASE-XLA-05464] c21 N71-14132

Attitude control and damping system for spacecraft Patent
[NASA-CASE-XLA-02551] c21 N71-21708

KUSHIDA, R. O.
Hydrogen rich gas generator
[NASA-CASE-NFO-13342-1] c37 N76-16446

Hydrogen rich gas generator
[NASA-CASE-NFO-13342-2] c44 N76-29700

L
LA RUSSA, P. J.
Array phasing device Patent
[NASA-CASE-EEC-10046] c10 N71-18722

LA VIGNA, T. A.
Buck boost voltage regulation circuit Patent
[NASA-CASE-GSC-10735-1] c10 N71-26085

LACKNER, R. G.
Method and apparatus of simulating zero gravity conditions Patent
[NASA-CASE-MFS-12750] c27 N71-16223

Method and apparatus for checking the stability of a setup for making reflection type holograms
[NASA-CASE-MFS-21455-1] c35 N74-15146

LAIACONA, P. P.
Bonding of reinforced Teflon to metals
[NASA-CASE-MFS-20482] c15 N72-22492

Method of preparing graphite reinforced aluminum composite
[NASA-CASE-MFS-21077-1] c24 N75-28135

LAIKE, D. D.
Electromechanical actuator
[NASA-CASE-XHP-05975] c15 N69-23185

LANAR, J. E.
Vortex-lift roll-control device
[NASA-CASE-LAR-11868-2] c08 N77-31176

LAMB, R. E.
Hypersonic reentry vehicle Patent
[NASA-CASE-XHS-04142] c31 N70-41631

LAMPERT, R. E.
Bismuth-lead coatings for gas bearings used in atmospheric environments and vacuum chambers Patent
[NASA-CASE-XGS-02011] c15 N71-20739

LAMPTON, M. L.
Resistive anode image converter
[NASA-CASE-HQN-10876-1] c33 N76-27473

LANDAUER, P. P.
Means for generating a sync signal in an FM communication system Patent
[NASA-CASE-XNP-10830] c07 N71-11281

LANDEL, R. F.
Method for controlling vapor content of a gas
[NASA-CASE-NFO-10633] c03 N72-28025

Parallel-plate viscometer with double diaphragm suspension
[NASA-CASE-NFO-11387] c14 N73-14429

Preparation of alkali metal dispersions
[NASA-CASE-XNP-08876] c17 N73-28573

LANDES, R. S.
Active microwave irises and windows
[NASA-CASE-LAR-10513-1] c07 N72-25170

Thin film microwave iris
[NASA-CASE-LAR-10511-1] c09 N72-29172

LANE, J. W.
Wide range dynamic pressure sensor
[NASA-CASE-ABC-10263-1] c14 N72-22438

LANEY, C. C., JR.
Micrometeoroid velocity measuring device Patent
[NASA-CASE-XLA-00495] c14 N70-41332

Micrometeoroid penetration measuring device Patent
[NASA-CASE-XLA-00941] c14 N71-23240

LANFORD, W. E.
Folding apparatus Patent
[NASA-CASE-XLA-00137] c15 N70-33180

Reflector space satellite Patent
[NASA-CASE-XLA-00138] c31 N70-37981

LANG, R.
Venting device for pressurized space suit helmet Patent
[NASA-CASE-XHS-09652-1] c05 N71-26333

LANGS, O. H.
Continuous detonation reaction engine Patent
[NASA-CASE-XNP-06926] c28 N71-22983

LANGS, R. A.
Wideband heterodyne receiver for laser communication system
[NASA-CASE-GSC-12053-1] c32 N77-28346

LANGMUIR, R. V.
Quadrupole mass filter with means to generate a noise spectrum exclusive of the resonant frequency of the desired ions to deflect stable ions
[NASA-CASE-XNP-04231] c14 N73-32325

LANSING, J. C., JR.

Method and apparatus for optically monitoring the angular position of a rotating mirror
[NASA-CASE-GSC-11353-1] c74 N74-21304

LAWT, E.

Gaseous control system for nuclear reactors
[NASA-CASE-XIF-04599] c22 N72-20597

LAWZC, C. D.

Simulated fuel assembly Patent
[NASA-CASE-XIF-00724] c14 N70-34669

LARK, R. F.

Hybrid composite laminate structures
[NASA-CASE-LEW-12118-1] c24 N77-27188

LARNER, J. W.

Conforming polisher for aspheric surface of revolution Patent
[NASA-CASE-XGS-02884] c15 N71-22705

LARSON, L. L.

Coaxial injector for reaction motors
[NASA-CASE-NFO-11095] c15 N72-25455

LARSEN, T. P.

Filter regeneration systems
[NASA-CASE-MSC-14273-1] c34 N75-33342

LATHAM, E. A.

The engine air intake system
[NASA-CASE-ABC-10761-1] c07 N77-18154

LATTO, W. I., JR.

Small rocket engine Patent
[NASA-CASE-XIE-00685] c28 N70-41992

LAUB, J. B.

Attitude control for spacecraft Patent
[NASA-CASE-IMP-00294] c21 N70-36938

Slit regulated gas journal bearing Patent
[NASA-CASE-XNF-00476] c15 N70-38620

LAUDENSLAGER, J. E.

Charge transfer reaction laser with preionization means
[NASA-CASE-NFC-13945-1] c36 N77-19418

LAUDERDALE, W. R.

Method and apparatus for securing to a spacecraft Patent
[NASA-CASE-MFS-11133] c31 N71-16222

LAUE, E. G.

Irradiance measuring device
[NASA-CASE-NFO-11493] c14 N73-12447

Wind sensor
[NASA-CASE-NFO-13462-1] c35 N76-24524

Passive intrusion detection system
[NASA-CASE-NFO-13804-1] c35 N77-19390

LAUE, R. H.

Driving lamps by induction
[NASA-CASE-MFS-21214-1] c09 N73-30181

LAUE, J. H.

Multi-mission module Patent
[NASA-CASE-IMP-01543] c31 N71-17730

LAUGHLIN, C. B., JR.

Position location system and method Patent
[NASA-CASE-GSC-10087-2] c21 N71-13958

Position location and data collection system and method Patent
[NASA-CASE-GSC-10083-1] c30 N71-16090

Traffic control system and method Patent
[NASA-CASE-GSC-10087-1] c02 N71-19287

Diversity receiving system with diversity phase lock Patent
[NASA-CASE-XGS-01222] c10 N71-20841

Position location system and method
[NASA-CASE-GSC-10087-3] c07 N72-12080

Doppler compensation by shifting transmitted object frequency within limits
[NASA-CASE-GSC-10087-4] c07 N73-20174

LAUNAN, R. A.

Hydrogen-fueled engine
[NASA-CASE-NFO-13763-1] c37 N77-11398

LAURENCE, J. C.

Method of fabricating a twisted composite superconductor
[NASA-CASE-LEW-11015] c26 N73-32571

LAURIE, R. O.

Adjustable mount for a trihedral mirror Patent
[NASA-CASE-IMP-08907] c23 N71-29123

LAVENSTEIN, R. I.

Telemetry processor
[NASA-CASE-GSC-11388-1] c07 N73-24187

LAVIGNE, R. C.

Position location and data collection system and method Patent
[NASA-CASE-GSC-10083-1] c30 N71-16090

LAWHITE, E.

Drying apparatus for photographic sheet material
[NASA-CASE-GSC-11074-1] c14 N73-28489

LAWRENCE, E. D.

Variable frequency oscillator with temperature compensation Patent
[NASA-CASE-IMP-03916] c09 N71-28810

LAWRENCE, T. E.

Focused laser Doppler velocimeter
[NASA-CASE-MFS-23178-1] c35 N77-10493

Wind measurement system
[NASA-CASE-MFS-23362-1] c47 N77-10753

LAWSON, A. G.

Electrical resistance spot welding and brazing techniques for metal bonding
[NASA-CASE-LAR-11072-1] c15 N73-40535

LAWSON, B. D.

Assembly for recovering a capsule Patent
[NASA-CASE-IMP-00641] c31 N70-36410

Space capsule ejection assembly Patent
[NASA-CASE-IMP-03169] c31 N71-15675

Mount for continuously orienting a collector dish in a system adapted to perform both diurnal and seasonal solar tracking
[NASA-CASE-MFS-23267-1] c35 N77-20401

LAWSON, D. D.

Dual membrane, hollow fiber fuel cell
[NASA-CASE-NFO-13732-1] c44 N77-19581

Polymeric electrolytic hygrometer
[NASA-CASE-NFO-13948-1] c35 N77-28470

LAYLAND, J. W.

Communications link for computers
[NASA-CASE-NFO-11161] c08 N72-25207

Digital demodulator-correlator
[NASA-CASE-NFO-13982-1] c32 N77-24341

LE BEL, P. J.

Ablation sensor Patent
[NASA-CASE-XLA-01794] c33 N71-21586

LE DOUX, P. E.

Bacteriostatic conformal coating and methods of application Patent
[NASA-CASE-GSC-10007] c18 N71-16046

LE VAY, K. B.

Holder for crystal resonators Patent
[NASA-CASE-IMP-03637] c15 N71-21311

LEATHERWOOD, J. D.

Active vibration isolator for flexible bodies Patent
[NASA-CASE-LAR-10106-1] c15 N71-27169

Active air cushion control system minimizing vertical cushion response
[NASA-CASE-LAR-10531-1] c02 N73-13023

LEAVY, W. A.

Switching mechanism with energy storage means Patent
[NASA-CASE-XGS-00473] c03 N70-38713

LEE, C. E.

Trigonometric vehicle guidance assembly which aligns the three perpendicular axes of two three-axes systems Patent
[NASA-CASE-IMP-00684] c21 N71-21688

LEE, D. A.

Hermetically sealed explosive release mechanism Patent
[NASA-CASE-XGS-00824] c15 N71-16078

LEE, D. E.

Ignition means for monopropellant Patent
[NASA-CASE-IMP-00876] c28 N70-41311

LEE, J. S.

High voltage transistor circuit Patent
[NASA-CASE-IMP-06937] c09 N71-19516

LEE, H. C.

Dual resonant cavity absorption cell Patent
[NASA-CASE-LAR-10305] c14 N71-26137

LEE, R. D.

Telemetry actuated switch
[NASA-CASE-ABC-10105] c09 N72-17153

Metallic intrusion detector system
[NASA-CASE-ABC-10265-1] c10 N72-28240

Intruder detection system
[NASA-CASE-ABC-10097-2] c07 N73-25160

Ultrasonic biomedical measuring and recording apparatus
[NASA-CASE-ABC-10597-1] c52 N74-20726

Bio-isolated dc operational amplifier
[NASA-CASE-ABC-10596-1] c33 N74-21851

Reference apparatus for medical ultrasonic transducer
[NASA-CASE-ABC-10753-1] c54 N75-21760

Biomedical ultrascopescope
[NASA-CASE-ARC-10994-1] c52 N76-33835

EKG and ultrascopescope display
[NASA-CASE-ARC-10994-2] c52 N77-15619

LEE, S. B.
Method and apparatus for producing an image from
a transparent object
[NASA-CASE-GSC-11989-1] c74 N77-28932

LEE, S. Y.
Physical correction filter for improving the
optical quality of an image
[NASA-CASE-HQN-10542-1] c74 N75-25706

LEE, W. S.
Surface finishing
[NASA-CASE-MSC-12631-1] c24 N77-28225
Surface finishing
[NASA-CASE-MSC-12631-2] c05 N77-31131

LEEB, W. B.
Method and apparatus for splitting a beam of
energy
[NASA-CASE-GSC-12083-1] c36 N76-15451

LEEPER, W. A.
High efficiency multifrequency feed
[NASA-CASE-GSC-11909] c32 N74-20863

LEES, W. L.
Field ionization electrodes Patent
[NASA-CASE-ERC-10013] c09 N71-26678
Method and apparatus for limiting field emission
current
[NASA-CASE-ERC-10015-2] c10 N72-27246

LEFFKE, W. O.
Flexibly connected support and skin Patent
[NASA-CASE-XIA-01027] c31 N71-24035

LEPTWICH, B. P.
Multi-lobar scan horizon sensor Patent
[NASA-CASE-IES-00809] c21 N70-35427

LEGGE, L.
Thermal insulation attaching means
[NASA-CASE-MSC-12619-1] c39 N75-21671
Thermal insulation attaching means
[NASA-CASE-MSC-12619-2] c16 N77-31237

LEGGE, L. J.
Method and device for detection of surface
discontinuities or defects
[NASA-CASE-MSC-14187-1] c35 N74-32879

LEIBECKI, B. F.
Electrically conductive fluorocarbon polymer
[NASA-CASE-XLE-06774-2] c06 N72-25150

LEIBOWITZ, L. P.
Annular arc accelerator shock tube
[NASA-CASE-NFO-13528-1] c09 N77-10071

LEISER, D. B.
Silica reusable surface insulation
[NASA-CASE-ARC-10721-1] c27 N76-22376
Reaction cured glass and glass coatings
[NASA-CASE-ARC-11051-1] c27 N77-10201

LEISS, A.
Air frame drag balance Patent
[NASA-CASE-XIA-00113] c14 N70-33386

LEHOS, P. B.
Metallic hot wire anemometer
[NASA-CASE-ARC-10911-1] c35 N77-20400

LENSCH, P. B.
Broadband modified turnstile antenna Patent
[NASA-CASE-MSC-12209] c09 N71-24842

LEHNETT, S. D.
Receiving and tracking phase modulated signals
[NASA-CASE-MSC-16170-1] c32 N77-12248

LEHNEN, C. L.
Remote lightning monitor system
[NASA-CASE-KSC-11031-1] c33 N77-21319

LEHT, W. B.
Method for fiberizing ceramic materials Patent
[NASA-CASE-XHF-00597] c18 N71-23088

LEON, B. A.
Stirring apparatus for plural test tubes Patent
[NASA-CASE-XAC-06956] c15 N71-21177
Automatic real-time pair-feeding system for
animals
[NASA-CASE-ARC-10302-1] c51 N74-15778

LEONARD, B. T.
Alignment apparatus using a laser having a
gravitationally sensitive cavity reflector
[NASA-CASE-ARC-10444-1] c16 N73-33397

LEPP, D. B.
Phototropic composition of matter
[NASA-CASE-XGS-03736] c14 N72-22443

LENN, G.
Insulation for piping
[NASA-CASE-MSC-19523-1] c31 N76-16245

LENNER, T.
Modulator for tone and binary signals
[NASA-CASE-GSC-11743-1] c32 N75-24981

LESH, J. B.
Multiple rate digital command detection system
with range clean-up capability
[NASA-CASE-NFO-13753-1] c32 N77-20289

LESKO, J. G., JR.
Programmable telemetry system Patent
[NASA-CASE-GSC-10131-1] c07 N71-24624

LESNIEWSKI, E. J.
Variable digital processor including a register
for shifting and rotating bits in either
direction Patent
[NASA-CASE-GSC-10186] c08 N71-33110
Data processor with conditionally supplied clock
signals
[NASA-CASE-GSC-10975-1] c08 N73-13187

LESSLEY, B. L.
Rotating shaft seal Patent
[NASA-CASE-XHF-02862-1] c15 N71-26294

LESSMAN, G. G.
Bimetallic junctions
[NASA-CASE-LEW-11573-1] c26 N77-28265

LEVIN, H.
Refractory porcelain enamel passive control
coating for high temperature alloys
[NASA-CASE-NFS-22324-1] c27 N75-27160

LEVIN, K. L.
Lunar landing flight research vehicle Patent
[NASA-CASE-XFR-00929] c31 N70-34966

LEVINE, H. W.
Atomic hydrogen maser with bulb temperature
control to remove wall shift in maser output
frequency
[NASA-CASE-HQN-10654-1] c16 N73-13489
Tunable cavity resonator with ramp shaped supports
[NASA-CASE-HQN-10790-1] c36 N74-11313

LEVINE, S. B.
Fused silicide coatings containing discrete
particles for protecting niobium alloys
[NASA-CASE-LEW-11179-1] c27 N76-16229

LEVINSON, H.
Conforming polisher for aspheric surface of
revolution Patent
[NASA-CASE-XGS-02884] c15 N71-22705

LEVY, G. S.
Multi-feed cone Cassegrain antenna Patent
[NASA-CASE-NFO-10539] c07 N71-11285

LEWICKI, G. W.
High voltage transistor amplifier with constant
current load
[NASA-CASE-NFO-11023] c09 N72-17155
Thermomagnetic recording and magneto-optic
playback system having constant intensity
laser beam control
[NASA-CASE-NFO-11317-2] c36 N74-13205
Use of thin film light detector
[NASA-CASE-NFO-11432-2] c35 N74-15090
Stored charge transistor
[NASA-CASE-NFO-11156-2] c33 N75-31331

LEWIS, B. F.
Photoelectron spectrometer with means for
stabilizing sample surface potential
[NASA-CASE-NFO-13772-1] c35 N76-26450

LEWIS, B. W.
Process for applying black coating to metals
Patent
[NASA-CASE-XLA-06199] c15 N71-24875
Barium release system
[NASA-CASE-LAR-10670-1] c06 N73-30097
Rocket having barium release system to create
ion clouds in the upper atmosphere
[NASA-CASE-LAR-10670-2] c15 N74-27360

LEWIS, D. J.
Mandrel for shaping solid propellant rocket fuel
into a motor casing Patent
[NASA-CASE-XLA-00304] c27 N70-34783
Solid propellant rocket motor and method of
making same
[NASA-CASE-XLA-1349] c20 N77-17143

LEWIS, G. W.
Subminiature insertable force transducer
[NASA-CASE-NFO-13423-1] c33 N75-31329
Miniature muscle displacement transducer
[NASA-CASE-NFO-13519-1] c33 N76-19338
Myocardium wall thickness transducer and
measuring method

[NASA-CASE-NFO-13644-1]	c52 N76-29895	Data-aided carrier tracking loops	[NASA-CASE-NFO-11282]	c10 N73-16205
Catheter tip force transducer for cardiovascular research		Coherent receiver employing nonlinear coherence detection for carrier tracking	[NASA-CASE-NFO-11921-1]	c32 N74-30523
LEWIS, J. R.	c52 N76-29896	LINDSEY, W. F.	Stereo photomicrography system	[NASA-CASE-LAR-10176-1]
Automatic transponder				c14 N72-20380
[NASA-CASE-GSC-12075-1]	c32 N77-31350	LINEBACK, L. D.	Thermal shock resistant hafnia ceramic material	[NASA-CASE-LAR-10894-1]
LEWIS, R.				c18 N73-14584
High temperature ferromagnetic cobalt-base alloy		LINEBARIER, R.	Varying density composite structure	[NASA-CASE-LAR-11181-1]
Patent				c39 N75-31479
[NASA-CASE-XLE-03629]	c17 N71-23248	LINFORD, R. E. F.	Flame detector operable in presence of proton radiation	[NASA-CASE-MFS-21577-1]
LEWIS, T. L.				c19 N74-29410
Acoustical transducer calibrating system and apparatus		LING, S. C.	Flux sensing device using a tubular core with toroidal gating coil and solenoidal output coil wound thereon	Patent
[NASA-CASE-FEC-10060-1]	c14 N73-27379		[NASA-CASE-XGS-01881]	c09 N70-40123
LEWY, L. L.		LINGLE, J. T.	Frequency control network for a current feedback oscillator	Patent
Analog-to-digital converter			[NASA-CASE-GSC-10041-1]	c10 N71-19416
[NASA-CASE-YNP-00477]	c08 N73-28045		Static inverter	Patent
LIBBEY, C. E.			[NASA-CASE-XGS-05289]	c09 N71-19470
Flexible wing deployment device	Patent	LIPANOVICH, B. I.	Medical subject monitoring systems	[NASA-CASE-MSC-14180-1]
[NASA-CASE-XLA-01220]	c02 N70-41863			c52 N76-14757
LIBBY, J. H.		LIPKE, D. W.	Doppler frequency spread correction device for multiplex transmissions	[NASA-CASE-XGS-02749]
Ultra-long monostable multivibrator employing bistable semiconductor switch to allow charging of timing circuit	Patent			c07 N65-39978
[NASA-CASE-XGS-00381]	c09 N70-34819	LIPOMA, P. C.	Television signal scan rate conversion system	Patent
Reversible ring counter employing cascaded single SCR stages	Patent		[NASA-CASE-XMS-07168]	c07 N71-11300
[NASA-CASE-XGS-01473]	c09 N71-10673		Burst synchronization detection system	Patent
LIBBY, W. F.			[NASA-CASE-XMS-05605-1]	c10 N71-19468
Continuous plasma light source			Data storage, image tube type	[NASA-CASE-MSC-14053-1]
[NASA-CASE-YNP-04167-2]	c25 N72-24753			c60 N74-12888
Continuous plasma laser			System for producing chroma signals	[NASA-CASE-MSC-14683-1]
[NASA-CASE-YNP-04167-3]	c36 N77-19416			c74 N77-18893
LIBBOTTI, J.		LIPPIITT, H. W., JR.	Electrode for biological recording	[NASA-CASE-XMS-02872]
Valving device for automatic refilling in cryogenic liquid systems				c05 N69-21925
[NASA-CASE-NFO-11177]	c15 N72-17453		Instrument for use in performing a controlled Valsalva maneuver	Patent
LIBBEMAN, S.			[NASA-CASE-XMS-01615]	c05 N70-41329
Resonant infrasonic gauging apparatus	[NASA-CASE-MSC-11847-1]	LISAGOR, W. B.	Controlled glass bead peening	Patent
[NASA-CASE-MSC-11847-1]	c14 N72-11363			[NASA-CASE-XLA-07390]
LIEBERT, C. E.				c15 N71-18616
Thermal barrier coating system		LISLE, R. V.	Lightning current measuring systems	[NASA-CASE-KSC-10807-1]
[NASA-CASE-LEW-12554-1]	c24 N76-23359			c33 N75-26246
LIGHT, D. J.		LIST, W. F.	Solid state television camera system	Patent
Fixture for supporting articles during vibration tests			[NASA-CASE-INP-06092]	c07 N71-24612
[NASA-CASE-MFS-20523]	c14 N72-27412		Phototransistor imaging system	[NASA-CASE-MFS-20809]
LIGHTSEY, G. E.				c23 N73-13660
Preparation of polyimides from mixtures of monomeric diamines and esters of polycarboxylic acids		LISTER, J. L.	Thermally conductive polymers	[NASA-CASE-GSC-11304-1]
[NASA-CASE-LEW-11325-1]	c06 N73-27980			c06 N72-21105
LILLEY, A. E.		LITANT, I.	Apparatus and method for separating a semiconductor wafer	Patent
Clear air turbulence detector			[NASA-CASE-EBC-10138]	c26 N71-14354
[NASA-CASE-EBC-10081]	c14 N72-28437		Method for detecting leaks in hermetically sealed containers	Patent
LIN, L. Y.			[NASA-CASE-EBC-10045]	c15 N71-24910
Signal processing apparatus for multiplex transmission	Patent	LITCHFORD, G. B.	Altitude measuring system	[NASA-CASE-EBC-10412-1]
[NASA-CASE-NFO-10388]	c07 N71-24622			c09 N73-12211
LIN, B. Y.		LITTLE, R. E.	Method of making pressure tight seal for super alloy	[NASA-CASE-LAR-10170-1]
Ceramic fiber insulating material and methods of producing same				c37 N74-11301
[NASA-CASE-MSC-14795-1]	c27 N76-15314	LITTLEJOHN, D. P.	High power-high voltage waterload	Patent
LINDBERG, J. G.				[NASA-CASE-INP-05381]
Method and apparatus for varying thermal conductivity	Patent	LIU, C. C.	Device for the detection of phenol and related compounds	[NASA-CASE-LEW-12513-1]
[NASA-CASE-INP-05524]	c33 N71-24876			c25 N77-18238
LINDBERG, R. A.		LIU, F. F.	Respiratory analysis system and method	
High temperature beryllium oxide capacitor				
[NASA-CASE-LEW-11938-1]	c33 N76-15373			
Bimetallic junctions				
[NASA-CASE-LEW-11573-1]	c26 N77-28265			
LINDIEFELT, R. E.				
An airlock				
[NASA-CASE-MFS-20922]	c31 N72-20840			
Airlock				
[NASA-CASE-MFS-20922-1]	c18 N74-22136			
LINDSEY, J. F., III				
Flexible blade antenna	Patent			
[NASA-CASE-MSC-12101]	c09 N71-18720			
LINDSEY, R. S., JR.				
Pulse stretcher for narrow pulses				
[NASA-CASE-MSC-14130-1]	c33 N74-32711			
Random pulse generator				
[NASA-CASE-MSC-14131-1]	c33 N75-19515			
LINDSEY, W. C.				
Transition tracking bit synchronization system				
[NASA-CASE-NFO-10844]	c07 N72-20140			

INVENTOR INDEX

LUDWIG, A. C.

[NASA-CASE-MSC-12436-1] c05 N73-32015
LLOYD, W. B.
 Bearing and gimbal lock mechanism and spiral
 flex lead module Patent
 [NASA-CASE-GSC-10556-1] c31 N71-26537
LOCH, P. J.
 Frequency modulation demodulator threshold
 extension device Patent
 [NASA-CASE-MSC-12165-1] c07 N71-33696
LOCKARD, H. L.
 Leak detector Patent
 [NASA-CASE-LAR-10323-1] c12 N71-17573
LOCKMAN, C. S.
 Method and apparatus for nondestructive testing
 of pressure vessels
 [NASA-CASE-WFO-12142-1] c38 N76-28563
LOCKWOOD, V. E.
 Landing arrangement for aerial vehicles Patent
 [NASA-CASE-XLA-00142] c02 N70-33286
 Landing arrangement for aerial vehicle Patent
 [NASA-CASE-XLA-00806] c02 N70-34858
 Landing arrangement for aerospace vehicle Patent
 [NASA-CASE-XLA-00805] c31 N70-38010
LOFTIN, L. K., JR.
 Wind tunnel airstream oscillating apparatus Patent
 [NASA-CASE-XLA-00112] c11 N70-33287
LOGAN, W. B.
 Method of preparing zinc orthotitanate pigment
 [NASA-CASE-NFS-23345-1] c27 N77-30237
LOH, G. H.
 Medical subject monitoring systems
 [NASA-CASE-MSC-14180-1] c52 N76-14757
LOHR, J. J.
 Variable stiffness polymeric damper
 [NASA-CASE-IAC-11225] c14 N69-27486
LOKESON, D. C.
 Voltage to frequency converter Patent
 [NASA-CASE-GSC-10022-1] c10 N71-25882
 X-Y alphanumeric character generator for
 oscilloscopes
 [NASA-CASE-GSC-11582-1] c33 N75-19517
 Speech analyzer
 [NASA-CASE-GSC-11898-1] c32 N77-30309
LOMBARD, J. O.
 Attitude control for spacecraft Patent
 [NASA-CASE-NXP-02982] c31 N70-41855
LONG, E. B., JR.
 A method for aerosol analysis by thermoluminescence
 [NASA-CASE-LAR-12046-1] c45 N77-17609
LONG, H. B.
 Precipitation detector Patent
 [NASA-CASE-XLA-02619] c10 N71-26334
LONG, R. A.
 High temperature compositions Patent
 [NASA-CASE-IHS-00370] c17 N71-20941
LONG, W. C.
 Technique for extending the frequency range of
 digital dividers
 [NASA-CASE-LAR-10730-1] c33 N74-10223
 Rotating joint signal coupler
 [NASA-CASE-LAR-11264-1] c33 N75-27261
 Nondestructive method for instrumenting
 helicopter rotor blades
 [NASA-CASE-LAR-11201-1] c35 N77-22452
LONGYEAR, W. D.
 Omnidirectional acceleration device Patent
 [NASA-CASE-HCN-10780] c14 N71-30265
LOOK, G. F.
 Pcam generator Patent
 [NASA-CASE-XLA-00838] c03 N70-36778
LOONIS, J. A.
 Device to prevent clogging in a hopper
 [NASA-CASE-LAR-10961-1] c15 N73-12496
LOOP, R. W.
 Absolute focus lock for microscopes
 [NASA-CASE-LAR-10184] c14 N72-22445
LOOSE, J. D.
 Steady state thermal radiometers
 [NASA-CASE-NFS-21108-1] c34 N74-27861
LOPEZ, A. E.
 Three-axis finger tip controller for switches
 Patent
 [NASA-CASE-IAC-02405] c09 N71-16089
LORD, H. C., III
 Analysis of hydrogen-deuterium mixtures
 [NASA-CASE-WFO-11322] c06 N72-25146
LOREIL, R. B.
 High temperature lens construction Patent
 [NASA-CASE-NXP-04111] c14 N71-15622

All sky pointing attitude control system
 [NASA-CASE-ABC-10716-1] c35 N77-20399
LOTHSCHORTZ, P. I.
 Stretcher Patent
 [NASA-CASE-IXF-06589] c05 N71-23159
LOUGHEAD, A. G.
 Linear differential pressure sensor Patent
 [NASA-CASE-IXF-01974] c14 N71-22752
LOUNSBERRY, E. D.
 Jet shoes
 [NASA-CASE-XLA-08491] c05 N69-21380
LOVALL, D. D.
 Electric field measuring and display system
 [NASA-CASE-KSC-10731-1] c33 N74-27862
LOVELL, J. S.
 Portable breathing system
 [NASA-CASE-MSC-16182-1] c54 N77-21847
LOVELL, R. E.
 Liquid metal slip ring
 [NASA-CASE-LEW-12277-1] c33 N76-28472
 Process for preparing liquid metal electrical
 contact device
 [NASA-CASE-LEW-11978-1] c33 N77-26385
LOVELOCK, J. E.
 Atmospheric sampling devices
 [NASA-CASE-WFO-11373] c13 N72-25323
LOVINGBERG, D. B.
 Voice operated controller Patent
 [NASA-CASE-XIA-04063] c31 N71-33160
LOW, C. A., JR.
 Electrostatic propulsion system with a direct
 nuclear electrogenerator Patent
 [NASA-CASE-XLE-00818] c22 N70-34248
LOWE, E. G.
 Continuous turning slip ring assembly Patent
 [NASA-CASE-IXF-01049] c15 N71-23049
LOWEN, I. B.
 Spacecraft attitude detection system by stellar
 reference Patent
 [NASA-CASE-IGS-03431] c21 N71-15642
 Roll alignment detector
 [NASA-CASE-GSC-10514-1] c14 N72-20379
LOWERY, J. R.
 Panel for selectively absorbing solar thermal
 energy and the method of producing said panel
 [NASA-CASE-NFS-22562-1] c44 N76-14595
LOWRY, J. G.
 Jet aircraft configuration Patent
 [NASA-CASE-XLA-00087] c02 N70-33332
 Variable-span aircraft Patent
 [NASA-CASE-XLA-00166] c02 N70-34178
LOY, C. A.
 Tank construction for space vehicles Patent
 [NASA-CASE-IXF-01899] c31 N70-41948
LOYD, C.
 System for maintaining a motor at a
 predetermined speed utilizing digital feedback
 means Patent
 [NASA-CASE-IXF-06892] c09 N71-24805
 RC rate generator for slow speed measurement
 Patent
 [NASA-CASE-IXF-02966] c10 N71-24863
LUBOWITZ, E. B.
 Ablative resin Patent
 [NASA-CASE-XLE-05913] c33 N71-14032
 Reinforced structural plastics
 [NASA-CASE-LEW-10199-1] c27 N74-23125
LUCAS, C. H.
 Analog to digital converter
 [NASA-CASE-WFO-13385-1] c33 N76-18345
LUCHERO, D. P.
 Method for detecting hydrogen gas
 [NASA-CASE-IXF-03873] c06 N65-39733
LUCHT, E. A.
 A technique for breaking ice in the path of a ship
 [NASA-CASE-LAR-10815-1] c16 N72-22520
LUCY, M. B.
 Molded composite pyrogen igniter for rocket motors
 [NASA-CASE-LAR-12018-1] c20 N76-29365
LUDWIG, A. C.
 Dual waveguide mode source having control means
 for adjusting the relative amplitude of two
 modes Patent
 [NASA-CASE-IXF-03134] c07 N71-10676
 Singly-curved reflector for use in high-gain
 antennas
 [NASA-CASE-WFO-11361] c07 N74-32169
 Dual frequency microwave reflex feed
 [NASA-CASE-WFO-13091-1] c09 N73-12214

Low loss dichroic plate
[NASA-CASE-NFO-13171-1] c32 N74-11000

LUDWIG, L. P.
Pcrl seal
[NASA-CASE-XLE-05130] c15 N69-21362
Pcrl seal Patent
[NASA-CASE-XLE-05130-2] c15 N71-19570
Spiral groove seal
[NASA-CASE-XLE-10326-2] c15 N72-29488
Spiral groove seal
[NASA-CASE-LEW-10326-3] c37 N74-10474
Spiral groove seal
[NASA-CASE-XLE-10326-4] c37 N74-15125
High speed, self-acting shaft seal
[NASA-CASE-LEW-11274-1] c37 N75-21631
Counter pumping debris excluder and separator
[NASA-CASE-LEW-11855-1] c37 N76-20487
Circumferential shaft seal
[NASA-CASE-LEW-12119-1] c37 N76-20488
Fluid seal for rotating shafts
[NASA-CASE-LEW-11676-1] c37 N76-22541
Gas path seal
[NASA-CASE-LEW-12131-1] c37 N77-24498
Shaft seal assembly for high speed and high pressure applications
[NASA-CASE-LEW-11873-1] c37 N77-27404

LUSBERG, S. S.
Thermionic tantalum emitter doped with oxygen Patent Application
[NASA-CASE-NFO-11138] c03 N70-34646
Thermionic diode switch Patent
[NASA-CASE-NFO-10404] c03 N71-12255

LUSHEBING, G. W.
Blade retainer assembly
[NASA-CASE-LEW-12608-1] c07 N77-27116

LUSK, R.
Sampling video compression system
[NASA-CASE-AEC-10984-1] c32 N77-24328

LUNCE, R. S.
Medical subject monitoring systems
[NASA-CASE-HSC-14180-1] c52 N76-14757

LUND, W. C.
Heated porous plug microthruster
[NASA-CASE-GSC-10640-1] c28 N72-18766

LUNDQUIST, J. R.
Preparation of high purity copper fluoride
[NASA-CASE-LEW-10794-1] c06 N72-17093

LUSHEAUGH, W. A.
Data compression system
[NASA-CASE-XNP-09785] c08 N69-21928
Data compressor Patent
[NASA-CASE-XNP-04067] c08 N71-22707
Error correcting method and apparatus Patent
[NASA-CASE-XNP-02748] c08 N71-22749
Comparator for the comparison of two binary numbers Patent
[NASA-CASE-XNP-04819] c08 N71-23295
Parallel generation of the check bits of a PN sequence Patent
[NASA-CASE-XNP-04623] c10 N71-26103
Versatile arithmetic unit for high speed sequential decoder
[NASA-CASE-NFO-11371] c08 N73-12177

LUTES, G. F., JR.
Broadband stable power multiplier Patent
[NASA-CASE-XNP-10854] c10 N71-26331
Cascaded complementary pair broadband transistor amplifiers Patent
[NASA-CASE-NFO-10003] c10 N71-26415
Low phase noise digital frequency divider
[NASA-CASE-NFO-11569] c10 N73-26229

LUTZ, R. B.
Operational integrator Patent
[NASA-CASE-NFO-10230] c09 N71-12520

LYLAND, J. W.
Versatile arithmetic unit for high speed sequential decoder
[NASA-CASE-NFO-11371] c08 N73-12177

LYNCH, E. J.
Three-axis adjustable loading structure
[NASA-CASE-FEC-10051-1] c35 N74-13129

LYNCH, T. L.
Pulsed excitation voltage circuit for transducers
[NASA-CASE-FRC-10036] c09 N72-22200

LYON, W. E.
Optical range finder having nonoverlapping complete images
[NASA-CASE-HSC-12105-1] c14 N72-21409

M

MACCONNELL, J. W.
Ultra stable frequency distribution system
[NASA-CASE-NFO-13836-1] c32 N76-31373

MACCOBOCHIE, I. O.
Excessive temperature warning system Patent
[NASA-CASE-XIA-01926] c14 N71-15620

MACDAVID, K. S.
Thermocouple installation
[NASA-CASE-NFO-13540-1] c35 N77-14409

MACPADDEN, J. A.
Rotating mandrel for assembly of inflatable devices Patent
[NASA-CASE-XIA-04143] c15 N71-17687

MACGLASHAN, W. F., JR.
Belleville spring assembly with elastic guides
[NASA-CASE-XNP-09452] c15 N69-27504
High pressure four-way valve Patent
[NASA-CASE-XNP-00214] c15 N70-36908
Multiple Belleville spring assembly Patent
[NASA-CASE-XNF-00840] c15 N70-38225
Pressure regulating system Patent
[NASA-CASE-XNP-00450] c15 N70-38603
Ejection unit Patent
[NASA-CASE-XNP-00676] c15 N70-38996
Reinforcing means for diaphragms Patent
[NASA-CASE-XNF-01962] c32 N70-41370
High pressure filter Patent
[NASA-CASE-XNP-00732] c28 N70-41447
Antiflutter ball check valve Patent
[NASA-CASE-XNF-01152] c15 N70-41811
High pressure regulator valve Patent
[NASA-CASE-XNP-00710] c15 N71-10778
Filler valve Patent
[NASA-CASE-XNF-01747] c15 N71-23024

MACKAY, C. A.
Quick disconnect latch and handle combination Patent
[NASA-CASE-HFS-11132] c15 N71-17649

MACLEOD, W. E.
Bacterial contamination monitor
[NASA-CASE-GSC-10879-1] c14 N72-25413

MACOMBER, J. W.
Nuclear reactor control rod assembly with improved driving mechanism Patent
[NASA-CASE-XLE-00298] c22 N70-34501

MACVRIGH, G. E.
Analog spatial maneuver computer
[NASA-CASE-GSC-10880-1] c08 N72-11172

MADDOX, J. W.
Air bearing
[NASA-CASE-WLF-10002] c15 N72-17451

MADEY, J. R.
Satellite appendage tie down cord Patent
[NASA-CASE-IGS-02554] c31 N71-21064
Redundant actuating mechanism Patent
[NASA-CASE-IGS-08718] c15 N71-24600
A rotary electric device
[NASA-CASE-GSC-12138-1] c33 N77-20344

MADISON, I. B.
Aerodynamic spike nozzle Patent
[NASA-CASE-IGS-01143] c31 N71-15647

MADSEN, B.
Apparatus and method for skin packaging articles
[NASA-CASE-HFS-20855] c15 N73-27405

MAHAN, J. C.
Device for preventing high voltage arcing in electron beam welding Patent
[NASA-CASE-XNF-08522] c15 N71-19486

MAIDEN, D. L.
Flow velocity and directional instrument
[NASA-CASE-LAR-10855-1] c14 N73-13415
Two dimensional wedge/translating shroud nozzle
[NASA-CASE-LAR-11919-1] c07 N76-22202

MAILLON, R. J.
Array phasing device Patent
[NASA-CASE-BRC-10046] c10 N71-18722
Circularly polarized antenna
[NASA-CASE-BRC-10214] c09 N72-31235
Phase control circuits using frequency multiplications for phased array antennas
[NASA-CASE-BRC-10285] c10 N73-16206

MAJOR, C. J.
Mixture separation cell Patent
[NASA-CASE-IHS-02952] c18 N71-20742

MALLING, L. B.
Digital television camera control system Patent
[NASA-CASE-IMP-01472] c14 N70-41807
Reduced bandwidth video communication system
utilizing sampling techniques Patent
[NASA-CASE-IMP-02791] c07 N71-23026

MALMBERG, J. E.
Waveform simulator Patent
[NASA-CASE-NFO-10251] c10 N71-27365

MALONE, L. E.
Emergency lunar communications system
[NASA-CASE-MFS-21042] c07 N72-25171

MANATT, S. L.
Audio frequency marker system
[NASA-CASE-NFO-11147] c14 N72-27408

MANCINELLI, E. R.
Telemetry processor
[NASA-CASE-GSC-11388-1] c07 N73-24187

MANDEL, C. B.
Azimuth laying system Patent
[NASA-CASE-IMP-01669] c21 N71-23289

MANDELKORN, J.
Method of baking a silicon semiconductor device
Patent
[NASA-CASE-XLE-02792] c26 N71-10607
Method of baking electrical contact on silicon
solar cell and resultant product Patent
[NASA-CASE-XLE-04787] c03 N71-20492
Ga or Sn doped silicon semiconductor composition
Patent
[NASA-CASE-XLE-10715] c26 N71-23292
Silicon solar cell with cover glass bonded to
cell by metal pattern Patent
[NASA-CASE-XLE-08569] c03 N71-23449
Semiconductor material and method of making same
Patent
[NASA-CASE-XLE-02798] c26 N71-23654
Method of attaching a cover glass to a silicon
solar cell Patent
[NASA-CASE-XLE-08569-2] c03 N71-24681

MANDELL, A.
A condition sensor system and method
[NASA-CASE-MSC-14805-1] c35 N76-26448

MANGION, C.
System for preconditioning a combustible vapor
[NASA-CASE-NFO-12072] c28 N72-22772

MANGOLD, D. W.
Medical subject monitoring systems
[NASA-CASE-MSC-14180-1] c52 N76-14757

MAUN, W. A.
Compact artificial hand
[NASA-CASE-NFO-13906-1] c54 N77-32723

MANNING, C. R., JR.
Controlled glass bead peening Patent
[NASA-CASE-XIA-07390] c15 N71-18616
Thermal shock resistant hafnia ceramic material
[NASA-CASE-LAR-10894-1] c18 N73-14584
Thermal shock and erosion resistant tantalum
carbide ceramic material
[NASA-CASE-LAR-11902-1] c27 N76-23436

MANOLI, B.
Aircraft-mounted crash-activated transmitter
device
[NASA-CASE-MFS-16609-3] c03 N76-32140

MANSOUB, M. W.
Servo-controlled intravital microscope system
[NASA-CASE-NFO-13214-1] c35 N75-25123

MANTLER, R. L.
Rocket propellant injector Patent
[NASA-CASE-XLE-00103] c28 N70-33241

MANUS, E. A.
Active microwave irises and windows
[NASA-CASE-LAR-10513-1] c07 N72-25170
Thin film microwave iris
[NASA-CASE-LAR-10511-1] c09 N72-29172
Logarithmic circuit with wide dynamic range
[NASA-CASE-GSC-12145-1] c33 N77-19319
Very narrow band width receiver
[NASA-CASE-GSC-12142-1] c32 N77-20299

MAPLE, W. E.
Analytical test apparatus and method for
determining oxide content of alkali metal Patent
[NASA-CASE-XLE-01997] c06 N71-23527

MAPLES, E. E.
Light intensity modulator controller Patent
[NASA-CASE-MNS-04300] c09 N71-19479

MARATA, R. J.
Thermal insulation protection means
[NASA-CASE-MSC-12737-1] c34 N77-22423

MARAK, R. J.
Life raft stabilizer
[NASA-CASE-MSC-12393-1] c02 N73-26006

MARCUS, B. D.
Flat-plate heat pipe
[NASA-CASE-GSC-11998-1] c34 N77-32413

MARCUS, H. L.
Laser extensometer
[NASA-CASE-MFS-19259-1] c36 N77-10516

MAREK, C. J.
Fuel combustor
[NASA-CASE-LEW-12137-1] c20 N76-20215

MARGOSIAN, P. B.
Electrostatic thruster with improved insulators
Patent
[NASA-CASE-XLE-01902] c28 N71-10574
Single grid accelerator for an ion thruster
[NASA-CASE-XLE-10453-2] c28 N73-27699

MARGRAF, H. J.
High pressure four-way valve Patent
[NASA-CASE-IMP-00214] c15 N70-36908

MARLEY, R. A.
Self-adjusting multisegment, deployable, natural
circulation radiator Patent
[NASA-CASE-XHQ-03673] c33 N71-29046

MARLOW, H. O.
Method of baking a cermet Patent
[NASA-CASE-LEW-10219-1] c18 N71-28729

MARLOW, R. E.
System for enhancing tool-exchange capabilities
of a portable wrench
[NASA-CASE-MFS-22283-1] c37 N75-33395
Remotely operable articulated manipulator
[NASA-CASE-MFS-22707-1] c37 N76-15457

MARPOIS, N.
Methods and apparatus employing vibratory energy
for wrenching Patent
[NASA-CASE-MFS-20586] c15 N71-17686

MARRELL, R. A.
Process for preparation of dianilinosilanes Patent
[NASA-CASE-IMP-06409] c06 N71-23230

MARONI, M. A., JR.
Pressure garment joint Patent
[NASA-CASE-MNS-09636] c05 N71-12344
Omnidirectional joint Patent
[NASA-CASE-MNS-09635] c05 N71-24623
Foreshortened convolute section for a
pressurized suit Patent
[NASA-CASE-MNS-09637-1] c05 N71-24730
Method of forming a root cord restrained
convolute section
[NASA-CASE-MSC-12398] c05 N72-20098
Restraint torso for a pressurized suit
[NASA-CASE-MSC-12397-1] c05 N72-25119

MARSH, H. E., JR.
Trifunctional alcohol
[NASA-CASE-NFO-10714] c06 N69-31244
Novel polycarboxylic prepolymeric materials and
polymers thereof Patent
[NASA-CASE-NFO-10596] c06 N71-25929
Aldehyde-containing urea-absorbing polysaccharides
[NASA-CASE-NFO-13620-1] c27 N77-30236
Oil and fat absorbing polymers
[NASA-CASE-NFO-11609-2] c27 N77-31308

MARSHALL, J. E.
Baseline stabilization system for ionization
detector Patent
[NASA-CASE-IMP-03128] c10 N70-41991

MARSHALL, T. B., JR.
Nuclear mass flowmeter
[NASA-CASE-MFS-20485] c14 N72-11365

MARSIK, S. J.
Selective nickel deposition
[NASA-CASE-LEW-10965-1] c15 N72-25452
Production of pure metals
[NASA-CASE-LEW-10906-1] c25 N74-30502
Process for making anhydrous metal halides
[NASA-CASE-LEW-11860-1] c37 N76-18458

MARTEL, R. J.
Amplitude steered array
[NASA-CASE-GSC-11446-1] c33 N74-20860

MARTIN, J. W.
Dynamic Doppler simulator Patent
[NASA-CASE-MNS-05454-1] c07 N71-12391

MARTIN, W. C.
Segmented back-up bar Patent
[NASA-CASE-IMP-00640] c15 N70-39924
Portable alignment tool Patent
[NASA-CASE-IMP-01452] c15 N70-41371

MARTIN, R. B.
Color perception tester
[NASA-CASE-MSC-10278] c05 N72-16015

MARTIN, S. C.
Correlation type phase detector
[NASA-CASE-GSC-11744-1] c33 N75-26243

MARTIN, W. L.
Phase-locked loop with sideband rejecting
properties Patent
[NASA-CASE-XNP-02723] c07 N70-41680
Method of resolving clock synchronization error
and means therefor Patent
[NASA-CASE-XNP-08875] c10 N71-23099
Communications link for computers
[NASA-CASE-NFO-11161] c08 N72-25207
Binary coded sequential acquisition ranging system
[NASA-CASE-NFO-11194] c08 N72-25209
Digital video display system using cathode ray
tube
[NASA-CASE-NFO-11342] c09 N72-25248
Digital demodulator-correlator
[NASA-CASE-NFO-13982-1] c32 N77-24341

MARTINAGE, L. B.
Power supply Patent
[NASA-CASE-XMS-02159] c10 N71-22961

MARTINECK, B. G.
Electrical connector for flat cables Patent
[NASA-CASE-XMF-00324] c09 N70-34596
Printed cable connector Patent
[NASA-CASE-XMF-00369] c09 N70-36494
Method of making a soldered connector Patent
[NASA-CASE-XNP-03498] c15 N71-15986
Electrical connector
[NASA-CASE-NFS-20757] c09 N72-28225

MARTUCCI, V. J.
Tuning arrangement for an electron discharge
device or the like Patent
[NASA-CASE-XNP-09771] c09 N71-24841

MARTZ, R. L.
Externally pressurized fluid bearing Patent
[NASA-CASE-XMF-00515] c15 N70-34664

MARZEK, R. A.
Tool for use in lifting pin supported objects
[NASA-CASE-NFO-13157-1] c37 N74-32918

MASCY, A. C.
Deep space monitor communication satellite
system Patent
[NASA-CASE-XPC-06029-1] c31 N71-24813

MASEK, T. D.
Electron bombardment ion engine Patent
[NASA-CASE-XNP-04124] c28 N71-21822
Feed system for an ion thruster
[NASA-CASE-NFO-10737] c28 N72-11709

MASHEJIAN, J.
Temperature sensitive capacitor device
[NASA-CASE-XNP-09750] c14 N69-39937
Thin film capacitive bolometer and temperature
sensor Patent
[NASA-CASE-NFO-10607] c09 N71-27232
Thin film temperature sensor and method of
making same
[NASA-CASE-NFO-11775] c26 N72-28761
Use of thin film light detector
[NASA-CASE-NFO-11432-2] c35 N74-15090
Deep trap, laser activated image converting system
[NASA-CASE-NFO-13131-1] c36 N75-19652
Stored charge transistor
[NASA-CASE-NFO-11156-2] c33 N75-31331
Method and apparatus for measurement of trap
density and energy distribution in dielectric
films
[NASA-CASE-NFO-13443-1] c76 N76-20994

MASLOWSKI, B. A.
Insulation foil and method of making
[NASA-CASE-LEW-11484-2] c24 N75-14839
Method of making an insulation foil
[NASA-CASE-LEW-11484-1] c24 N75-33181

MASOV, J. W.
Microcomputerized electric field meter
diagnostic and calibration system
[NASA-CASE-MSC-11035-1] c33 N77-20343

MASOV, B. J.
Collapsible reflector Patent
[NASA-CASE-XMS-03454] c09 N71-20658

MASOV, B. B.
Radial module space station Patent
[NASA-CASE-XMS-01906] c31 N70-41373

MASUCCO, A. A.
Non-flammable elastomeric fiber from a
fluorinated elastomer and containing an
halogenated flame retardant
[NASA-CASE-MSC-14331-1] c27 N76-24405
Flame retardant elastomeric compositions
[NASA-CASE-MSC-14331-2] c27 N76-24408
Flame retardant elastomeric compositions
[NASA-CASE-MSC-14331-3] c27 N76-24409

MATEER, G. G.
Flow separation detector
[NASA-CASE-ARC-11046-1] c35 N76-28535

MATHUR, F. P.
Program for computer aided reliability estimation
[NASA-CASE-NFO-13086-1] c15 N73-12495

MATSUHIRO, D. S.
Shoulder harness and lap belt restraint system
[NASA-CASE-ARC-10519-2] c05 N75-25915

MATSUMOTO, Y.
Sampling video compression system
[NASA-CASE-ARC-10984-1] c32 N77-24328

MATTAUCH, R. J.
Infrared detectors
[NASA-CASE-LAR-10728-1] c14 N73-12445

MATTHEWS, P. B., JR.
Lightweight, variable solidity knitted parachute
fabric
[NASA-CASE-LAR-10776-1] c02 N74-10034

MAULDIN, D. G.
Contourograph system for monitoring
electrocardiograms
[NASA-CASE-MSC-13407-1] c10 N72-20225

MAUS, L. C.
Dual mode solid state power switch
[NASA-CASE-NFS-22880-1] c33 N76-31410
Dual mode solid state power switch
[NASA-CASE-NFS-22880-2] c33 N77-31407

MAXWELL, B. S.
Spacecraft attitude detection system by stellar
reference Patent
[NASA-CASE-IGS-03431] c21 N71-15642
Programmable telemetry system Patent
[NASA-CASE-GSC-10131-1] c07 N71-24624
Plural beam antenna
[NASA-CASE-GSC-11013-1] c09 N73-19234

MAXWELL, B. W.
Helical coaxial resonator RF filter
[NASA-CASE-IGS-02816] c07 N69-24323

MAXWELL, B. F., JR.
Electronic background suppression method and
apparatus for a field scanning sensor
[NASA-CASE-IGS-05211] c07 N69-39980

MAXWELL, W. A.
Process of casting heavy slips Patent
[NASA-CASE-XLE-00106] c15 N71-16076

MAY, C. E.
Selective nickel deposition
[NASA-CASE-LEW-10965-1] c15 N72-25452
Production of pure metals
[NASA-CASE-LEW-10906-1] c25 N74-30502
Process for making anhydrous metal halides
[NASA-CASE-LEW-11860-1] c37 N76-18458

MAY, C. J.
Capacitor power pak Patent Application
[NASA-CASE-LAR-10367-1] c03 N70-26817

MAYALL, S. D.
Frictionless universal joint Patent
[NASA-CASE-NFO-10646] c15 N71-28467

MAYNARD, O. B.
Radial module space station Patent
[NASA-CASE-XMS-01906] c31 N70-41373

MAYNE, R. C.
Shock absorbing mount for electrical components
[NASA-CASE-NFO-13253-1] c37 N75-18573

MAYO, B. E.
Hypersonic reentry vehicle Patent
[NASA-CASE-XMS-04142] c31 N70-41631

MAYO, J. W.
Connector - Electrical
[NASA-CASE-XLA-01288] c09 N69-21470
Tubular coupling having frangible connecting means
[NASA-CASE-XLA-02854] c15 N69-27490
Missile stage separation indicator and stage
initiator Patent
[NASA-CASE-XLA-00791] c03 N70-39930
Detector panels-micrometeoroid impact Patent
[NASA-CASE-XLA-05906] c31 N71-16221

MAYO, B. F.
Electric-arc heater Patent
[NASA-CASE-XLA-00330] c33 N70-34540

HAZABIS, G. A.
Application of semiconductor diffusants to solar cells by screen printing
[NASA-CASE-LEW-12775-1] c44 N77-24589

HAZEE, L.
Analog-to-digital conversion system Patent
[NASA-CASE-IAC-00404] c08 N70-40125

HAZIQUE, J.
A cervix-to-rectum measuring device in a radiation applicator for use in the treatment of cervical cancer
[NASA-CASE-GSC-12081-2] c52 N77-26796

HCAFFEE, D. F.
Bi-polar phase detector and corrector for split phase PCM data signals Patent
[NASA-CASE-IGS-01590] c07 N71-12392
Radio frequency coaxial high pass filter Patent
[NASA-CASE-IGS-01418] c09 N71-23573

HCALEXANDER, E. T.
Laser head for simultaneous optical pumping of several dye lasers
[NASA-CASE-IAR-11341-1] c36 N75-19655

HCBRYER, E. O.
Soft frame adjustable eyeglasses Patent
[NASA-CASE-IKS-06064] c05 N71-23096

HCBRYAR
Ion-exchange membrane with platinum electrode assembly Patent
[NASA-CASE-IKS-02063] c03 N71-29044

HCBRYAR, H.
Reconstituted asbestos matrix
[NASA-CASE-MSC-12568-1] c24 N76-14204

HCCALG, J. C.
Electric arc welding Patent
[NASA-CASE-IKF-00392] c15 N70-34814

HCCALLUM, J.
Porous electrode comprising a bonded stack of pieces of corrugated metal foil
[NASA-CASE-GSC-11368-1] c09 N73-32108

HCCAMPBELL, W. B.
Electric arc welding Patent
[NASA-CASE-IKF-00392] c15 N70-34814
Weld control system using thermocouple wire Patent
[NASA-CASE-MFS-06074] c15 N71-20393
RC rate generator for slow speed measurement Patent
[NASA-CASE-IKF-02966] c10 N71-24863
A dc motor speed control system Patent
[NASA-CASE-MFS-14610] c09 N71-28886

HCCANDLESS, L. C.
Method of making reinforced composite structure
[NASA-CASE-LEW-12619-1] c24 N77-19171

HCCANN, D. B.
Phototransistor
[NASA-CASE-MFS-20407] c09 N73-19235

HCCANN, E. J.
Device for handling heavy loads
[NASA-CASE-IKF-08969] c11 N69-27466

HCCARTY, J. L.
Lunar penetrometer Patent
[NASA-CASE-ILA-00934] c14 N71-22765

HCCAUL, P. F.
Sidereal frequency generator Patent
[NASA-CASE-IGS-02610] c14 N71-23174

HCCHESENEY, J. F., JR.
High voltage distributor
[NASA-CASE-GSC-11849-1] c33 N76-16332

HCCHESENEY, J. B.
Modulator for tone and binary signals
[NASA-CASE-GSC-11743-1] c32 N75-24981

HCCLEBAHN, J. O.
High speed shutter
[NASA-CASE-ARC-10516-1] c70 N74-21300
Photomultiplier circuit including means for rapidly reducing the sensitivity thereof
[NASA-CASE-ARC-10593-1] c33 N74-27682

HCCLOBBY, W. B.
A 2 degree/90 degree laboratory scattering photometer
[NASA-CASE-GSC-12088-1] c35 N76-17369

HCCONAUGHBY, B. T.
Star scanner
[NASA-CASE-GSC-11569-1] c09 N74-30886

HCCOWBELL, J. C.
Method of plating copper on aluminum Patent
[NASA-CASE-ILA-08966-1] c17 N71-25903

HCCOWBACK, W.
Single action separation mechanism Patent
[NASA-CASE-ILA-00188] c15 N71-22874

MCCORMICK, C. T., JR.
Automatic signal range selector for metering devices Patent
[NASA-CASE-IKS-06497] c14 N71-26244

MCCRAW, D. L.
Emergency escape system Patent
[NASA-CASE-MSC-12086-1] c05 N71-12345

MCCREIA, F. E.
Indexing microwave switch Patent
[NASA-CASE-IKF-06507] c09 N71-23548

MCCREARY, B. A.
Parallel motion suspension device Patent
[NASA-CASE-IKF-01567] c15 N70-41310

MCCREIGHT, L. E.
Electrophoretic sample insertion
[NASA-CASE-MFS-21395-1] c25 N74-26948
Apparatus for conducting flow electrophoresis in the substantial absence of gravity
[NASA-CASE-MFS-21394-1] c34 N74-27744

MCCUSKER, I. J.
Foldable solar concentrator Patent
[NASA-CASE-ILA-04622] c03 N70-41580

MCDANIELS, D. L.
Reinforced metallic composites Patent
[NASA-CASE-ILE-02428] c17 N70-33288
Method of making fiber reinforced metallic composites Patent
[NASA-CASE-ILE-00231] c17 N70-38198
Reinforced metallic composites Patent
[NASA-CASE-ILE-00228] c17 N70-38490

MCDARIS, R. A.
Emergency escape system Patent
[NASA-CASE-IKS-07814] c15 N71-27067

MCDAVID, L. S.
Specific wavelength colorimeter
[NASA-CASE-MSC-14081-1] c35 N74-27860

MCDERMOND, D. K.
Synchronous counter Patent
[NASA-CASE-IGS-02440] c08 N71-19432

MCDIVITT, P. E.
Laser coolant and ultraviolet filter
[NASA-CASE-MFS-20180] c16 N72-12440

MCDONALD, G. E.
Nuclear fuel elements
[NASA-CASE-ILE-00209] c22 N73-32528
Selective coating for solar panels
[NASA-CASE-IFW-12159-1] c44 N76-15603

MCDONALD, R. I.
Gas low pressure low flow rate metering system Patent
[NASA-CASE-FRC-10022] c12 N71-26546
Respiration monitor
[NASA-CASE-FRC-10012] c14 N72-17329

MCDONOGAL, A. E.
Force-balanced, throttle valve Patent
[NASA-CASE-NFO-10808] c15 N71-27432
Quick disconnect coupling
[NASA-CASE-NFO-11202] c15 N72-25450
Rotary actuator
[NASA-CASE-NFO-10680] c31 N73-14855
Disconnect unit
[NASA-CASE-NFO-11330] c33 N73-26958
Zero torque gear head wrench
[NASA-CASE-NFO-13059-1] c37 N76-20480

MCHILMAN, E. A.
Bonding method in the manufacture of continuous regression rate sensor devices
[NASA-CASE-IAR-10337-1] c24 N75-30260

MCFADIN, L. W.
Platinum resistance thermometer circuit
[NASA-CASE-MSC-12327-1] c35 N77-27368

MCGANNON, W. J.
Ophthalmic method and apparatus
[NASA-CASE-LEW-11669-1] c05 N73-27062
Ophthalmic liquifaction pump
[NASA-CASE-LEW-12051-1] c52 N75-33640
Intra-ocular pressure normalization technique and equipment
[NASA-CASE-LEW-12723-1] c52 N77-30737

MCGHEE, J. B.
Frangible tube energy dissipation Patent
[NASA-CASE-ILA-00754] c15 N70-34850
Omnidirectional multiple impact landing system Patent
[NASA-CASE-ILA-09881] c31 N71-16085

MCGOUGH, J. T.
Emergency escape system Patent
[NASA-CASE-IKS-07814] c15 N71-27067

HCHAPPIE, D. J.
 Extensible cable support Patent
 [NASA-CASE-XMF-07587] c15 N71-18701

HCHATTON, A. D.
 Canister closing device Patent
 [NASA-CASE-XLA-01446] c15 N71-21528
 Traveling sealer for contoured table Patent
 [NASA-CASE-XLA-01494] c15 N71-24164
 Amplifying ribbon extensometer
 [NASA-CASE-LAR-11825-1] c35 N77-22449

HCHATTON, A. F.
 Nozzle extraction process and handlemeter for
 measuring handle
 [NASA-CASE-LAR-12147-1] c27 N77-10198

HCHENNEY, T. F.
 Miniature carbon dioxide sensor and methods
 [NASA-CASE-MSC-13332-1] c14 N72-21408

HCKEE, C. W.
 Fluid control apparatus and method
 [NASA-CASE-LAR-11110-1] c34 N75-26282

HCKENNA, J. F., JR.
 Fault tolerant clock apparatus utilizing a
 controlled minority of clock elements
 [NASA-CASE-MSC-12531-1] c35 N75-30504

HCKENNA, R. I.
 Automatic character skew and spacing checking
 network
 [NASA-CASE-GSC-11925-1] c33 N76-18353

HCKENZIE, E. L.
 Diatomic infrared gasdynamic laser
 [NASA-CASE-ARC-10370-1] c36 N75-31426

HCKECHW, D.
 Method for attaching a fused-quartz mirror to a
 conductive metal substrate
 [NASA-CASE-MFS-23405-1] c26 N77-29260

HCKEVITT, F. I.
 Swirling flow nozzle Patent
 [NASA-CASE-XNP-03692] c28 N71-24321

HCKINNEY, B. I.
 Self-calibrating displacement transducer Patent
 [NASA-CASE-XLA-00781] c09 N71-22999

HCKINNON, E. A.
 External liquid-spray cooling of turbine blades
 Patent
 [NASA-CASE-XIE-00037] c28 N70-33372

HCLAIB, J. B.
 Air bearing Patent
 [NASA-CASE-XNF-01887] c15 N71-10617

HCLAUCHLAN, J. B.
 Horizon sensor with a plurality of fixedly
 positioned radiation compensated radiation
 sensitive detectors Patent
 [NASA-CASE-XNP-06557] c14 N71-21088
 Light position locating system Patent
 [NASA-CASE-XNP-01059] c23 N71-21821

HCLERN, F. B.
 Supersonic aircraft Patent
 [NASA-CASE-XLA-04451] c02 N71-12243

HCLYBAN, C. W. I.
 Inverter oscillator with voltage feedback
 [NASA-CASE-NFO-10760] c09 N72-25254
 Banded transformer cores
 [NASA-CASE-NFO-11966-1] c33 N74-17928
 Method and apparatus for automatic load sharing
 among paralleled converters
 [NASA-CASE-NFO-13832-1] c33 N76-26393

HCLYBAN, W. I.
 Phase substitution of spare converter for a
 failed one of parallel phase staggered
 converters
 [NASA-CASE-NFO-13812-1] c33 N77-30365

HCHASTER, L. B.
 Meteoroid detector
 [NASA-CASE-LAR-10483-1] c14 N73-32327

HCHENAR, M. P.
 Vapor phase growth of groups 3-5 compounds by
 hydrogen chloride transport of the elements
 [NASA-CASE-LAR-11144-1] c25 N75-26043

HCHUITT, W. C.
 Dual latching solenoid valve Patent
 [NASA-CASE-XNS-05890] c09 N71-23191

HCHOWALD, A. D.
 Thin film gauge
 [NASA-CASE-NFO-10617-1] c35 N74-22095

HCHSTAY, J. J.
 Cable fault locator
 [NASA-CASE-KSC-10899-1] c33 N77-28394

HCHILLIAMS, I. G.
 Two color horizon sensor

[NASA-CASE-EBC-10174] c14 N72-25409

HEAD, D. C.
 Variable frequency oscillator with temperature
 compensation Patent
 [NASA-CASE-XNP-03916] c09 N71-28810

HEADOR, T. G., JR.
 Light shield and cooling apparatus
 [NASA-CASE-LAR-10089-1] c34 N74-23066

HEALY, G. E.
 Electrostatic thruster with improved insulators
 Patent
 [NASA-CASE-XIE-01902] c28 N71-10574
 High voltage divider system Patent
 [NASA-CASE-XIE-02008] c09 N71-21583

HEDCALF, W. A.
 Gas filter mounting structure
 [NASA-CASE-MSC-12297] c14 N72-23457

HEINTEL, A. J., JR.
 Combined optical attitude and altitude
 indicating instrument Patent
 [NASA-CASE-XLA-01907] c14 N71-23268

HEISENHOLDER, G. W.
 Photosensitive device to detect bearing
 deviation Patent
 [NASA-CASE-XNP-00438] c21 N70-35089
 Roll attitude star sensor system Patent
 [NASA-CASE-XNP-01307] c21 N70-41856

HEISSINGER, R. F.
 Method of and device for determining the
 characteristics and flux distribution of
 micrometeorites
 [NASA-CASE-NFO-12127-1] c91 N74-13130

HEISSNER, C. W., JR.
 Turbulence intensity indicator
 [NASA-CASE-LAR-11833-1] c06 N76-31229

HELANED, L.
 Angular velocity and acceleration measuring
 apparatus
 [NASA-CASE-EBC-10292] c14 N72-25410

HELFI, L. T., JR.
 Gas analyzer for bi-gaseous mixtures Patent
 [NASA-CASE-XLA-01131] c14 N71-10774
 Ionization vacuum gauge with all but the end of
 the ion collector shielded Patent
 [NASA-CASE-XLA-07424] c14 N71-18482

HELLARS, B.
 Wideband heterodyne receiver for laser
 communication system
 [NASA-CASE-GSC-12053-1] c32 N77-28346

HELUGIN, J. P.
 Technique for recovery of voice data from heat
 damaged magnetic tape
 [NASA-CASE-MSC-14219-1] c32 N74-27612

HELVILLE, B. D. S.
 Stark-effect modulation of CO2 laser with NE2D
 [NASA-CASE-NFO-11945-1] c36 N76-18427

HENEFREE, E. O.
 Three-axis controller Patent
 [NASA-CASE-XAC-01404] c05 N70-41581
 Proportional controller Patent
 [NASA-CASE-XAC-03392] c03 N70-41954

HENGES, M. J.
 Precipitation detector Patent
 [NASA-CASE-XLA-02619] c10 N71-26334
 Dielectric molding apparatus Patent
 [NASA-CASE-LAR-10121-1] c15 N71-26721

HENCHELLI, V. J.
 Optically detonated explosive device
 [NASA-CASE-NFO-11743-1] c28 N74-27425
 Electroexplosive device
 [NASA-CASE-NFO-13858-1] c28 N77-17258

HENTZER, C. A.
 Horn antenna having V-shaped corrugated slots
 [NASA-CASE-LAR-11112-1] c32 N76-15340

HENZIES, E. T.
 Monitoring atmospheric pollutants with a
 heterodyne radiometer transmitter-receiver
 [NASA-CASE-NFO-11919-1] c35 N74-11284
 Fluorescence detector for monitoring atmospheric
 pollutants
 [NASA-CASE-NFO-13231-1] c45 N75-27585

HERLEN, H. H.
 Horizon sensor with a plurality of fixedly
 positioned radiation compensated radiation
 sensitive detectors Patent
 [NASA-CASE-XNF-06957] c14 N71-21088

HERBICK, V. E.
 Stabilization of gravity oriented satellites
 Patent

[NASA-CASE-XPC-01591] c31 N71-17729
HEERILL, J. T., IV
 Apparatus for applying simulator g-forces to an arm of an aircraft simulator pilot
 [NASA-CASE-IAR-10550-1] c09 N74-30597
HESSING, S. V.
 Apparatus for positioning modular components on a vertical or overhead surface
 [NASA-CASE-LAR-11465-1] c37 N76-21554
HESSEBER, A.
 System for generating timing and control signals
 [NASA-CASE-NFO-13125-1] c33 N75-19519
HETTELLO, L.
 Apparatus and method for jet noise suppression
 [NASA-CASE-LAR-11903-1] c07 N77-15036
HESZAROS, G.
 Recovery of radiation damaged solar cells through thermal annealing
 [NASA-CASE-XGS-04047-2] c03 N72-11062
HETCALFE, A. G.
 Silicide coatings for refractory metals Patent
 [NASA-CASE-XLE-10910] c18 N71-29040
HETZGER, A. E.
 Dual purpose optical instrument capable of simultaneously acting as spectrometer and diffractometer
 [NASA-CASE-INP-05231] c14 N73-28491
HETZLER, A. J.
 Black-body furnace Patent
 [NASA-CASE-XLE-01399] c33 N71-15625
HEYER, A. J., JR.
 Modification and improvements to cooled blades Patent
 [NASA-CASE-XIB-00092] c15 N70-33264
 Aerial capsule emergency separation device Patent
 [NASA-CASE-XIA-00115] c03 N70-33343
 Space capsule Patent
 [NASA-CASE-XIA-00149] c31 N70-37938
 Vehicle parachute and equipment jettison system Patent
 [NASA-CASE-XIA-00195] c02 N70-38009
 Ablation structures Patent
 [NASA-CASE-XMS-01816] c33 N71-15623
 Space capsule Patent
 [NASA-CASE-XIA-01332] c31 N71-15664
HEYER, J. A.
 Altitude sensing device
 [NASA-CASE-XMS-01994-1] c14 N72-17326
HEYER, J. F.
 Time-division multiplexer Patent
 [NASA-CASE-INP-00431] c09 N70-38998
HEYER, K. A.
 High-temperature, high-pressure spherical segment valve Patent
 [NASA-CASE-XAC-00074] c15 N70-34817
MICHAEL, J. E.
 Connector - Electrical
 [NASA-CASE-XIA-01288] c09 N69-21470
 Missile stage separation indicator and stage initiator Patent
 [NASA-CASE-XIA-00791] c03 N70-39930
MICHAEL, J. L.
 Telemetry processor
 [NASA-CASE-GSC-11388-1] c07 N73-24187
MICHEL, R. E.
 Convoluting device for forming convolutions and the like Patent
 [NASA-CASE-INP-05297] c15 N71-23811
MICKELSEN, W. E.
 High-vacuum condenser tank for ion rocket tests Patent
 [NASA-CASE-XLE-00168] c11 N70-33278
 Electrostatic propulsion system with a direct nuclear electrogenerator Patent
 [NASA-CASE-XLE-00818] c22 N70-34248
MIDDLETON, J. B.
 Technique for extending the frequency range of digital dividers
 [NASA-CASE-LAR-10730-1] c33 N74-10223
MIDDLETON, R. L.
 Cryogenic thermal insulation Patent
 [NASA-CASE-INP-05046] c33 N71-28892
MIDDLETON, W. D.
 Supersonic aircraft Patent
 [NASA-CASE-XIA-04451] c02 N71-12243
MIBBTSCHIN, J. L.
 Radio frequency filter device
 [NASA-CASE-XLA-02609] c09 N72-25256
MIKSZAN, D. P.
 Frequency shift keying apparatus Patent
 [NASA-CASE-XGS-01537] c07 N71-23405
NIKULAS, M. M., JR.
 Composite sandwich lattice structure
 [NASA-CASE-IAR-11898-1] c24 N77-15103
 Composite sandwich lattice structure
 [NASA-CASE-IAR-11898-2] c24 N77-26242
MILDICE, J. W.
 Light radiation direction indicator with a baffle of two parallel grids
 [NASA-CASE-XBP-03930] c14 N69-24331
MILES, P. A.
 Clear air turbulence detector
 [NASA-CASE-HFS-21244-1] c36 N75-15028
MILKULLA, V.
 Method for making a hot wire anemometer and product thereof
 [NASA-CASE-ABC-10900-1] c35 N77-24454
MILLER, A. J.
 Binary to binary coded decimal converter
 [NASA-CASE-GSC-12044-1] c60 N76-13781
MILLER, C. E.
 Densitometer Patent
 [NASA-CASE-XLE-00688] c14 N70-41330
MILLER, C. G.
 Dispensing targets for ion beam particle generators
 [NASA-CASE-NFO-13112-1] c75 N74-26767
 Low cost solar energy collection system
 [NASA-CASE-NFO-13579-1] c44 N75-28519
 Sampler of gas borne particles
 [NASA-CASE-NFO-13396-1] c35 N76-18401
 Indicator providing continuous indication of the presence of a specific pollutant in air
 [NASA-CASE-NFO-13474-1] c45 N76-21742
 Portable, linear-focused solar thermal energy collecting system
 [NASA-CASE-NFO-13734-1] c44 N76-26690
 Cryostat system for temperatures on the order of 2 deg K or less
 [NASA-CASE-NFO-13459-1] c31 N77-10229
 Solar energy collection system
 [NASA-CASE-NFO-13579-2] c44 N77-20565
 Low cost solar energy collection system
 [NASA-CASE-NFO-13579-3] c44 N77-20566
 Compact, high intensity arc lamp with internal magnetic field producing means
 [NASA-CASE-NFO-11510-1] c33 N77-21315
 Depressurization of arc lamps
 [NASA-CASE-NFO-10790-1] c33 N77-21316
 Arc control in compact arc lamps
 [NASA-CASE-NFO-10870-1] c33 N77-22386
 Internal combustion engine with electrostatic discharging fuels
 [NASA-CASE-NFO-13798-1] c37 N77-25535
 Solar pond
 [NASA-CASE-NFO-13581-2] c44 N77-28584
 Low to high temperature energy conversion system
 [NASA-CASE-NFO-13510-1] c44 N77-32581
 Three-dimensional tracking solar energy concentrator and method for making same
 [NASA-CASE-NFO-13736-1] c44 N77-32583
MILLER, D. P.
 Controllers Patent
 [NASA-CASE-XMS-07487] c15 N71-23255
MILLER, H. B.
 Compensating radiometer
 [NASA-CASE-XIA-04556] c14 N65-27484
 Heat sensing instrument Patent
 [NASA-CASE-XLA-01551] c14 N71-22989
 Spherical measurement device
 [NASA-CASE-XLA-06683] c14 N72-28436
MILLER, J. A., JR.
 Method of forming difunctional polyisobutylene
 [NASA-CASE-NFO-10893] c27 N73-22710
MILLER, J. C.
 Apparatus for detecting the amount of material in a resonant cavity container Patent
 [NASA-CASE-INP-02500] c18 N71-27397
MILLER, J. E.
 Satellite interlace synchronization system
 [NASA-CASE-GSC-10390-1] c07 N72-11149
MILLER, J. G.
 Ultrasonic calibration device
 [NASA-CASE-LAR-11435-1] c35 N76-15432
MILLER, J. L.
 Boring bar drive mechanism Patent
 [NASA-CASE-XLA-03661] c15 N71-33518

MILLER, P. C.
Low temperature aluminum alloy Patent
[NASA-CASE-XMF-02786] c17 N71-20743

MILLIGAN, G. C.
Digital memory sense amplifying means Patent
[NASA-CASE-XMF-01012] c08 N71-28925

MILLIKEN, D. E.
Film feed camera having a detent means Patent
[NASA-CASE-LAR-10686] c14 N71-28935

MILLIKEN, J. F.
Linear differential pressure sensor Patent
[NASA-CASE-IMF-01974] c14 N71-22752

MILLS, C. E.
Telemetry processor
[NASA-CASE-GSC-11388-1] c07 N73-24187

MILLS, M. K.
Tracking antenna system Patent
[NASA-CASE-GSC-10553-1] c07 N71-19854
Antenna array at focal plane of reflector with
coupling network for beam switching Patent
[NASA-CASE-GSC-10220-1] c07 N71-27233

MILLS, S. E.
Transient-compensated SCR inverter
[NASA-CASE-XIA-08507] c09 N69-39984
Apparatus for microbiological sampling
[NASA-CASE-LAR-11069-1] c35 N75-12272
Automatic inoculating apparatus
[NASA-CASE-LAR-11074-1] c51 N75-13502
Automatic microbial transfer device
[NASA-CASE-LAR-11354-1] c35 N75-27330
Measurement of gas production of microorganisms
[NASA-CASE-LAR-11326-1] c35 N75-33368
Automated single-slide staining device
[NASA-CASE-LAR-11649-1] c51 N77-27677

MILLY, J. J.
Satellite despinn device Patent
[NASA-CASE-XMF-08523] c31 N71-20396

MINKIN, H. L.
Liquid flow sight assembly Patent
[NASA-CASE-XIE-02998] c14 N70-42074

MINOTT, E. O.
Retrodirective optical system
[NASA-CASE-XGS-04480] c16 N69-27491
Retrodirective modulator Patent
[NASA-CASE-GSC-10062] c14 N71-15605

MINTER, E. J.
Method of peening and portable peening gun
[NASA-CASE-MFS-23047-1] c37 N76-18454

MINTCH, F. E.
Window defect planar mapping technique
[NASA-CASE-MSC-19442-1] c74 N77-10899

MINTON, U. O.
Window defect planar mapping technique
[NASA-CASE-MSC-19442-1] c74 N77-10899

MITCHELL, D. E.
Borescope with variable angle scope
[NASA-CASE-MFS-15162] c14 N72-32452

MITCHELL, F. E.
Attitude control for spacecraft Patent
[NASA-CASE-XMF-00294] c21 N70-36938

MITCHELL, G. A.
Airflow control system for supersonic inlets
[NASA-CASE-LEW-11188-1] c02 N74-20646

MITCHELL, M. E.
Method and apparatus for detection and location
of microleaks Patent
[NASA-CASE-XMF-02307] c14 N71-10779

MITCHELL, V. E.
Digital cardiometer system Patent
[NASA-CASE-IMS-02399] c05 N71-22896

MITCHUM, L. L., JR.
Collapsible loop antenna for space vehicle Patent
[NASA-CASE-XMF-00437] c07 N70-40202

MIXSON, J. S.
Ring wing tension vehicle Patent
[NASA-CASE-XIA-04901] c31 N71-24315

MOACAMIN, J.
Icane membrane separator
[NASA-CASE-MPO-11091] c18 N72-22567
Method of making hollow elastomeric bodies
[NASA-CASE-MPO-13535-1] c37 N76-31524

MOERKEL, W. E.
Electro-thermal rocket Patent
[NASA-CASE-XIE-00267] c28 N70-33356

MOEDE, L. W.
Wide range analog-to-digital converter with a
variable gain amplifier
[NASA-CASE-MPO-11018] c08 N72-21200

MOEN, W. K.
Self-cycling fluid heater
[NASA-CASE-MSC-15567-1] c33 N73-16918

HOFFITT, F. L.
Image magnification adapter for cameras Patent
[NASA-CASE-IMF-03844-1] c14 N71-26474

MOGAVEERO, L. N.
System and method for tracking a signal source
[NASA-CASE-HQN-10880-1] c32 N75-30385

MOHDT, J. F.
Nuclear thermionic converter
[NASA-CASE-MPO-13121-1] c73 N77-18891

MONFORD, L. G., JR.
Radiometric temperature reference Patent
[NASA-CASE-MSC-13276-1] c14 N71-27058
Multifunction audio digitizer
[NASA-CASE-MSC-13855-1] c35 N74-17885
Digital communication system
[NASA-CASE-MSC-13912-1] c32 N74-30524
Binary concatenated coding system
[NASA-CASE-MSC-14082-1] c60 N76-23850

MONTITH, J. E.
Flow velocity and directional instrument
[NASA-CASE-AB-10855-1] c14 N73-13415

MONTITH, L. K.
Particulate and aerosol detector
[NASA-CASE-LAR-11434-1] c35 N76-22509

MONTGOMERY, L. C.
Process for preparing sterile solid propellants
Patent
[NASA-CASE-XMF-01749] c27 N70-41897
Processing for producing a sterilized instrument
Patent
[NASA-CASE-XMF-09763] c14 N71-20461

MONTGOMERY, L. D.
Readout electrode assembly for measuring
biological impedance
[NASA-CASE-ABC-10816-1] c35 N76-24525

MOODY, D. L., JR.
Readout electrode assembly for measuring
biological impedance
[NASA-CASE-ABC-10816-1] c35 N76-24525

MOORE, C. D.
Waveform simulator Patent
[NASA-CASE-MPO-10251] c10 N71-27365

MOORE, H. D.
Reversible ring counter employing cascaded
single SCR stages Patent
[NASA-CASE-XGS-01473] c09 N71-10673

MOORE, R. C.
Open loop digital frequency multiplier
[NASA-CASE-MSC-12709-1] c33 N77-24375

MOORE, R. L.
Trigonometric vehicle guidance assembly which
aligns the three perpendicular axes of two
three-axes systems Patent
[NASA-CASE-XMF-00684] c21 N71-21688
Rotary actuator
[NASA-CASE-MPO-10680] c31 N73-14855

MOORE, T. J.
Welding blades to rotors
[NASA-CASE-LEW-10533-1] c15 N73-28515
Enhanced diffusion welding
[NASA-CASE-LEW-11388-1] c15 N73-32358
Production of hollow components for rolling
element bearings by diffusion welding
[NASA-CASE-LEW-11026-1] c15 N73-33383
Apparatus for welding blades to rotors
[NASA-CASE-LEW-10533-2] c37 N74-11300
Diffusion welding in air
[NASA-CASE-LEW-11387-1] c37 N74-18128

MOORE, W. A.
Journal bearings
[NASA-CASE-LEW-11076-1] c37 N74-21061
Journal Bearings
[NASA-CASE-LEW-11076-2] c37 N74-32921
Lubricated journal bearing
[NASA-CASE-LEW-11076-3] c37 N75-30562
Fluid journal bearings
[NASA-CASE-LEW-11076-4] c37 N76-15461

MORANDO, J. A.
Hydraulic transformer Patent
[NASA-CASE-MFS-20830] c15 N71-30028

MORDECAI, T. T.
Method of recording a gas flow pattern Patent
[NASA-CASE-XMF-01779] c12 N71-20815

MORECROFT, J. B.
Incremental motion drive system Patent
[NASA-CASE-INP-08897] c15 N71-17694

MORRILL, P. A.
Process for preparing sterile solid propellants
Patent
[NASA-CASE-INP-01749] c27 N70-41897
Processing for producing a sterilized instrument
Patent
[NASA-CASE-INP-05763] c14 N71-20461

MORRIS, O. S., III
Deformable bearing seat
[NASA-CASE-LEW-12527-1] c37 N77-32500
Bearing seat usable in a gas turbine engine
[NASA-CASE-LEW-12477-1] c37 N77-32501

MORGAN, I. W., JR.
Translatory shock absorber for attitude sensors
[NASA-CASE-MFS-22905-1] c19 N76-22284

MORGAN, J. E.
A condition sensor system and method
[NASA-CASE-MSC-14805-1] c35 N76-26448

MORGAN, W. C.
Thin-walled pressure vessel Patent
[NASA-CASE-ILF-04677] c15 N71-10577

MORISSETTE, S.
Junction range finder
[NASA-CASE-KSC-10108] c14 N73-25461

MORRELL, G.
Method for continuous variation of propellant
flow and thrust in propulsive devices Patent
[NASA-CASE-ILE-00177] c28 N70-40367

MORRIS, D. E.
Silphenyleresiloxane polymers having in-chain
perfluoralkyl groups
[NASA-CASE-MFS-20579] c06 N72-25151
Polymerizable disilanes having in-chain
perfluoralkyl groups
[NASA-CASE-MFS-20979-2] c06 N73-32030

MORRIS, J. P.
Probes having ring and primary sensor at same
potential to prevent collection of stray wall
currents in ionized gases
[NASA-CASE-XLE-00690] c25 N69-39884
Thermocouples of molybdenum and iridium alloys
for more stable vacuum-high temperature
performance
[NASA-CASE-LEW-12174-1] c35 N76-19407
Thermocouples of tantalum and rhenium alloys for
more stable vacuum-high temperature performance
[NASA-CASE-LEW-12050-1] c35 N77-32454
Cesium thermionic converters having lanthanum
hexaboride electrodes
[NASA-CASE-LEW-12038-2] c44 N77-32595

MORRIS, J. E.
Difference circuit Patent
[NASA-CASE-INP-08274] c10 N71-13537

MORRISON, B. D.
Anti-fog composition
[NASA-CASE-MSC-13530-2] c23 N75-14834

MORSE, C. F.
Method and device for cooling Patent
[NASA-CASE-MCN-00938] c33 N71-29053

MORTENSEN, L. O.
Impact monitoring apparatus
[NASA-CASE-MSC-15626-1] c14 N72-25411

MOSER, B. G.
Zeta potential flowmeter Patent
[NASA-CASE-INP-06509] c14 N71-23226
Method for controlling vapor content
of a gas
[NASA-CASE-HFO-10633] c03 N72-28025

MOSER, J. C.
Electronic checkout system for space vehicles
Patent
[NASA-CASE-IKS-08012-2] c31 N71-15566

MOSIEN, B.
Pressed disc type sensing electrodes with ion-
screening means Patent
[NASA-CASE-XMS-04212-1] c05 N71-12346
Plated electrodes Patent
[NASA-CASE-XMS-04213-1] c09 N71-26002
Method of making a perspiration resistant
biopotential electrode
[NASA-CASE-MSC-90153-2] c05 N72-25120

MOSIEN, J. E.
Decontamination of petroleum products Patent
[NASA-CASE-INP-03835] c06 N71-23499

MOSOLANI, D. L.
Rotary leveling base platform
[NASA-CASE-ARC-10981-1] c35 N77-10498

MOUNTVALA, A. J.
Lightweight refractory insulation and method of
preparing the same Patent
[NASA-CASE-INP-05279] c18 N71-16124

MOYER, I. W.
Redundant actuating mechanism Patent
[NASA-CASE-IGS-08718] c15 N71-24600
Delayed simultaneous release mechanism
[NASA-CASE-GSC-10814-1] c03 N73-20039

MOZ, T. S.
Direct heating surface combustor
[NASA-CASE-LEW-11877-1] c44 N76-28646

MUEHTER, P. P.
Heat sterilizable patient ventilator
[NASA-CASE-NFO-13313-1] c54 N75-27761

MUELLEN, B. L.
A solar array strip and a method for forming the
same
[NASA-CASE-NFO-13652-1] c44 N77-28585

MUELLEN, W. A.
Aldehyde-containing urea-absorbing polysaccharides
[NASA-CASE-NFO-13620-1] c27 N77-30236

MUGLER, S. W.
Precipitation detector Patent
[NASA-CASE-ILF-02619] c10 N71-26334

MULHERRN, J. E., JR.
Recorder using selective noise filter
[NASA-CASE-ERC-10112] c07 N72-21119

MULLEN, D. L.
Matched thermistors for microwave power meters
Patent
[NASA-CASE-NFO-10348] c10 N71-12554
Broadband microwave waveguide window Patent
[NASA-CASE-INP-08880] c09 N71-24808

MULLEN, L. O.
Electrical insulating layer process
[NASA-CASE-LEW-10489-1] c15 N72-25447

MULLER, K.
Electric arc light source having undercut
recessed anode
[NASA-CASE-ARC-10266-1] c33 N75-29318

MULLER, R. M.
Method and apparatus for measuring web material
wound on a reel
[NASA-CASE-GSC-11902-1] c38 N77-17495

MULLIKEN, R. F.
Method of repairing discontinuity in fiberglass
structures
[NASA-CASE-LAR-10416-1] c24 N74-30001

MUSOLA, P. E.
Laser head for simultaneous optical pumping of
several dye lasers
[NASA-CASE-LAR-11341-1] c36 N75-19655

MUSOZ, R. E.
High efficiency multivibrator Patent
[NASA-CASE-IAC-00942] c10 N71-16042
Nonlinear analog-to-digital converter Patent
[NASA-CASE-IAC-04031] c08 N71-18594
Demodulation system Patent
[NASA-CASE-IAC-04030] c10 N71-19472
Phase quadrature-plural channel data
transmission system Patent
[NASA-CASE-IAC-06302] c08 N71-19763
Continuous Fourier transform method and apparatus
[NASA-CASE-ARC-10466-1] c60 N75-13539

MUSON, R. E.
Turnstile slot antenna
[NASA-CASE-GSC-11428-1] c32 N74-20864

MURACA, R. F.
Apparatus for testing polymeric materials Patent
[NASA-CASE-INP-09699] c06 N71-24607
Procedure and apparatus for determination of
water in nitrogen tetroxide
[NASA-CASE-NFO-10234] c06 N72-17094

MURCH, R. E.
Metal containing polymers from cyclic tetrameric
phenylphosphonitrilamides Patent
[NASA-CASE-HQN-10364] c06 N71-27363

MURPHY, A. J.
Optically actuated two position mechanical mover
[NASA-CASE-NFO-13105-1] c37 N74-21060

MURPHY, D. W.
Frangible link
[NASA-CASE-MSC-11849-1] c15 N72-22488

MURPHY, P. L.
Bimetallic power controlled actuator
[NASA-CASE-INP-09776] c09 N69-39929

MURPHY, J. P.
All sky pointing attitude control system

[NASA-CASE-ABC-10716-1] c35 N77-20399
MURPHY, W. J.
 Barium release system
 [NASA-CASE-LAR-10670-1] c06 N73-30097
 Rocket having barium release system to create
 ion clouds in the upper atmosphere
 [NASA-CASE-LAR-10670-2] c15 N74-27360
MURTY, M. V. R. K.
 Concave grating spectrometer Patent
 [NASA-CASE-XGS-01036] c14 N70-40003
MUSICK, R. O.
 Two-axis controller Patent
 [NASA-CASE-XFR-04104] c03 N70-42073
MUSSETT, E. W.
 Device for separating occupant from an ejection
 seat Patent
 [NASA-CASE-XMS-04625] c05 N71-20718
MYERS, D. A.
 Portable environmental control system Patent
 [NASA-CASE-XMS-09632-1] c05 N71-11203
MYERS, I. T.
 A regulated high efficiency, lightweight
 capacitor-diode multiplier DC to DC converter
 [NASA-CASE-LFW-12791-1] c33 N77-24385
MYERS, W. H.
 Duct coupling for single-handed operation Patent
 [NASA-CASE-MFS-20395] c15 N71-24903
 Spherical bearing
 [NASA-CASE-MFS-23447-1] c37 N77-11403
 Mechanical thermal motor
 [NASA-CASE-MFS-23062-1] c37 N77-12402

N

NAESITH, R. L.
 Aeroflexible structures
 [NASA-CASE-XLA-06095] c01 N69-39981
NAGANO, S.
 Overload protection system for power inverter
 [NASA-CASE-NFO-13872-1] c33 N77-17359
 Circuit for automatic load sharing in parallel
 converter modules
 [NASA-CASE-NFC-14056-1] c33 N77-32402
NAGLE, W. J.
 Multi-cell battery protection system
 [NASA-CASE-LFW-12039-1] c44 N76-23713
NAIDITCH, S.
 Method of producing crystalline materials
 [NASA-CASE-NFO-10440] c15 N72-21466
NAIMER, J.
 High visibility air sea rescue panel
 [NASA-CASE-MSC-12564-1] c54 N76-15792
NAKADA, M. P.
 Time of flight mass spectrometer with feedback
 means from the detector to the low source and
 a specific counter Patent
 [NASA-CASE-XNP-01056] c14 N71-23041
NAKAMURA, H. H.
 Lightweight refractory insulation and method of
 preparing the same Patent
 [NASA-CASE-XNF-05279] c18 N71-16124
NAKABISHI, S.
 Ion thruster cathode Patent Application
 [NASA-CASE-LFW-10814-1] c28 N70-35422
 Plasma device feed system Patent
 [NASA-CASE-XLE-02902] c25 N71-21694
 Ion thruster accelerator system Patent
 [NASA-CASE-LFW-10106-1] c28 N71-26642
 Propellant feed isolator Patent
 [NASA-CASE-LFW-10210-1] c28 N71-26781
 Single grid accelerator for an ion thruster
 [NASA-CASE-XLE-10453-2] c28 N73-27699
NAKICH, B. B.
 Apparatus for scanning the surface of a
 cylindrical body
 [NASA-CASE-NFO-11661-1] c36 N74-20009
 Digital servo control of random sound test
 excitation
 [NASA-CASE-NFO-11623-1] c71 N74-31148
NANCE, H. H.
 A dc motor speed control system Patent
 [NASA-CASE-MFS-14610] c09 N71-28886
NAPLES, J. F.
 Method for forming plastic materials Patent
 [NASA-CASE-XMS-05516] c15 N71-17803
NASON, G. H.
 Flexible blade antenna Patent
 [NASA-CASE-MSC-12101] c09 N71-18720

NASUTI, A. J.
 Test fixture for pellet-like electrical elements
 [NASA-CASE-XNP-06032] c09 N69-21926
 Support structure for irradiated elements Patent
 [NASA-CASE-XNP-06031] c15 N71-15606
NAUMANN, B. C.
 Fatigue testing device Patent
 [NASA-CASE-XLA-02131] c32 N70-42003
 Automatic fatigue test temperature programmer
 Patent
 [NASA-CASE-XLA-02059] c33 N71-24276
 Arbitrarily shaped model survey system Patent
 [NASA-CASE-LAR-10098] c32 N71-26681
 Function generator for synthesizing complex
 vibration mode patterns
 [NASA-CASE-LAR-10310-1] c10 N73-20253
NAUMANN, B. J.
 Liquid aerosol dispenser
 [NASA-CASE-MFS-20829] c12 N72-21310
 Carbon monoxide monitor
 [NASA-CASE-MFS-22060-1] c35 N75-29380
NEAL, P. F.
 Emergency escape system Patent
 [NASA-CASE-XKS-07814] c15 N71-27067
NEALY, J. E.
 Combustion detector
 [NASA-CASE-LAR-10739-1] c14 N73-16484
NELSON, B.
 Deflective rod switch with elastic support and
 sealing means Patent
 [NASA-CASE-XNP-09808] c09 N71-12518
NELSON, B. W.
 Optical machine tool alignment indicator Patent
 [NASA-CASE-XAC-09489-1] c15 N71-26673
NELSON, C. A.
 Flipflop interrogator and bi-polar current
 driver Patent
 [NASA-CASE-XGS-03058] c10 N71-19547
NELSON, C. B.
 Ablation sensor
 [NASA-CASE-XLA-01781] c14 N65-39975
 Reentry communication by material addition Patent
 [NASA-CASE-XLA-01552] c07 N71-11284
NELSON, D. E.
 Convoluting device for forming convolutions and
 the like Patent
 [NASA-CASE-XNP-05297] c15 N71-23811
NELSON, E. P.
 Safety-type locking pin
 [NASA-CASE-MFS-18495] c15 N72-11385
NELSON, H. H.
 Telemetry word forming unit
 [NASA-CASE-XNP-09225] c09 N69-24333
NELSON, W. J.
 Slosh alleviator Patent
 [NASA-CASE-XLA-05749] c15 N71-19569
NERHEIN, M. H.
 Inert gas metallic vapor laser
 [NASA-CASE-NFO-13449-1] c36 N75-32441
 Double discharge metal vapor laser with metal
 halide as a lasant
 [NASA-CASE-NFO-13448-2] c36 N77-24469
NEUMAN, F. D.
 Aircraft design concept
 [NASA-CASE-LAR-11852-1] c05 N77-15027
NEWBY, D. I.
 Hole cutter
 [NASA-CASE-MFS-22649-1] c37 N75-25186
NEWCOMB, A. L., JR.
 Electromagnetic mirror drive system
 [NASA-CASE-XLA-03724] c14 N69-27461
 Ac power amplifier Patent Application
 [NASA-CASE-LAR-10218-1] c09 N70-34559
 Variable duration pulse integrator Patent
 [NASA-CASE-XLA-01219] c10 N71-23084
 Variable width pulse integrator Patent
 [NASA-CASE-XLA-03356] c10 N71-23315
 Attitude sensor
 [NASA-CASE-LAR-10586-1] c19 N74-15089
NEWCOMB, J. F.
 Null device for hand controller Patent
 [NASA-CASE-XLA-01808] c15 N71-20740
NEWCOMB, W. L.
 Quick release separation mechanism Patent
 [NASA-CASE-XLA-01441] c15 N70-41679
NEWCOMBE, C. A.
 Method for making a heat insulating and ablative
 structure
 [NASA-CASE-XMS-01108] c15 N69-24322

NEWMAN, D. F.
 Test stand system for vacuum chambers
 [NASA-CASE-NFS-21362] c11 N73-20267
NEWMAN, J. B.
 Catalyst bed removing tool Patent
 [NASA-CASE-IRF-00811] c15 N70-36901
NEWMAN, J. B.
 New polymers of perfluorobutadiene and method of
 manufacture Patent application
 [NASA-CASE-NFO-10863] c06 N70-11251
 Polymers of perfluorobutadiene and method of
 manufacture
 [NASA-CASE-NFO-10863-2] c06 N72-25152
NICHOLS, G. B.
 Apparatus for controlling the velocity of an
 electromechanical drive for interferometers
 and the like Patent
 [NASA-CASE-XGS-03532] c14 N71-17627
 Apparatus for phase stability determination Patent
 [NASA-CASE-XGS-01118] c10 N71-23662
NICHOLS, J. J.
 Force measuring instrument Patent
 [NASA-CASE-IRF-00456] c14 N70-34705
NICHOLS, M. B.
 Nacelle afterbody for jet engines Patent
 [NASA-CASE-XLA-10450] c28 N71-21493
 Dual cycle aircraft turbine engine
 [NASA-CASE-XAR-11310-1] c07 N77-28118
NICKLAS, J. C.
 Attitude control for spacecraft Patent
 [NASA-CASE-XNP-02982] c31 N70-41855
 Solar vane actuator Patent
 [NASA-CASE-XNP-05535] c14 N71-23040
NICKS, O. W.
 Quiet jet transport aircraft
 [NASA-CASE-XAR-11087-1] c02 N73-26008
NICOL, W. S.
 Vapor deposition apparatus
 [NASA-CASE-HCN-10462] c25 N75-29192
NIEDRA, J. B.
 Pulse coupling circuit
 [NASA-CASE-LFW-10433-1] c09 N72-22197
NIEDZWIECKI, E. W.
 Swirl can primary combustor
 [NASA-CASE-LFW-11326-1] c23 N73-30665
 Controlled separation combustor
 [NASA-CASE-LFW-11593-1] c20 N76-14190
NIELSON, I. L.
 Technique of elbow bending small jacketed
 transfer lines Patent
 [NASA-CASE-IRF-10475] c15 N71-24679
NIER, A. O.
 Mass spectrometer with magnetic pole pieces
 providing the magnetic fields for both the
 magnetic sector and an ion-type vacuum pump
 [NASA-CASE-NFO-13663-1] c35 N77-14406
NISSIN, E.
 Suppression of flutter
 [NASA-CASE-XAR-10682-1] c02 N73-26004
NITTA, E.
 High-temperature, high-pressure spherical
 segment valve Patent
 [NASA-CASE-XAC-00074] c15 N70-34817
NIXON, D. L.
 Parabolic reflector horn feed with spillover
 correction Patent
 [NASA-CASE-XNP-00540] c09 N70-35382
 Indexing microwave switch Patent
 [NASA-CASE-XNP-06507] c09 N71-23548
 Rotary vane attenuator wherein rotor has
 orthogonally disposed resistive and dielectric
 cards
 [NASA-CASE-NFO-11418-1] c14 N73-13420
NOBLE, B. B.
 Solenoid construction Patent
 [NASA-CASE-XNP-01951] c09 N70-41929
NOLA, F. J.
 Positive dc to positive dc converter Patent
 [NASA-CASE-XNP-14301] c09 N71-23188
 Positive dc to negative dc converter Patent
 [NASA-CASE-XNP-08217] c03 N71-23239
 Transistor servo system including a unique
 differential amplifier circuit Patent
 [NASA-CASE-XNP-05195] c10 N71-24861
 Brushless direct current tachometer Patent
 [NASA-CASE-NFS-20385] c09 N71-24904
 Redundant speed control for brushless Hall
 effect motor
 [NASA-CASE-NFS-20207-1] c09 N73-32107
 Induction motor control system with voltage
 controlled oscillator circuit
 [NASA-CASE-NFS-21465-1] c10 N73-32145
 Variable frequency inverter for ac induction
 motors with torque, speed and braking control
 [NASA-CASE-NFS-22088-1] c33 N75-15874
 Power factor control system for ac induction
 motors
 [NASA-CASE-NFS-23280-1] c33 N76-28471
 Tachometer
 [NASA-CASE-NFS-23175-1] c35 N77-30436
NOOD, D. B.
 Method of joining aluminum to stainless steel
 Patent
 [NASA-CASE-NFS-07369] c15 N71-20443
NORDEN, B. B.
 Hybrid holographic system using reflected and
 transmitted object beams simultaneously Patent
 [NASA-CASE-NFS-20074] c16 N71-15565
 Holographic thin film analyzer
 [NASA-CASE-NFS-20823-1] c16 N73-30476
NORRIS, S. J.
 Spherical shield Patent
 [NASA-CASE-IRF-01855] c15 N71-28937
NORGREN, C. T.
 Colloid propulsion method and apparatus Patent
 [NASA-CASE-XLB-00817] c28 N70-33265
 Gas turbine combustor Patent
 [NASA-CASE-LFW-10286-1] c28 N71-28915
 Splash groove fuel injector
 [NASA-CASE-LFW-12417-1] c07 N76-22198
NORM, C. L.
 Sight switch using an infrared source and sensor
 Patent
 [NASA-CASE-IRF-03934] c09 N71-22985
NORMAN, B. B.
 Vibration isolation system using compression
 springs
 [NASA-CASE-NFO-11012] c15 N72-11391
 Expandable support means
 [NASA-CASE-NFO-11059] c15 N72-17454
 Zero torque gear head wrench
 [NASA-CASE-NFO-13059-1] c37 N76-20480
NORTON, B. B.
 Thruster maintenance system Patent
 [NASA-CASE-NFS-20325] c28 N71-27095
 Self-recording portable soil penetrometer
 [NASA-CASE-NFS-20774] c14 N73-19420
NORWOOD, J. J.
 Magnetically controlled plasma accelerator Patent
 [NASA-CASE-XLA-00327] c25 N71-29184
NOSSER, E. J.
 Frequency measurement by coincidence detection
 with standard frequency
 [NASA-CASE-HSC-14649-1] c33 N76-16331
NOVOZNYI, J. E.
 Ultraprecise calibrated light source
 [NASA-CASE-HSC-12293-1] c14 N72-27411
NUSBAUM, W. J.
 Apparatus for absorbing and measuring power Patent
 [NASA-CASE-XLB-00720] c14 N70-40401

O

OAKLEY, E. C.
 RF-source resistance meters
 [NASA-CASE-NFO-11291-1] c14 N73-30388
OBERSCHNIDT, M.
 Flow test device
 [NASA-CASE-XNS-04917] c14 N69-24257
OBLER, B. D.
 Air conditioning system and component therefore
 distributing air flow from opposite directions
 [NASA-CASE-GSC-11445-1] c31 N74-27902
OBRENN, D. B., III
 Technique for recovery of voice data from heat
 damaged magnetic tape
 [NASA-CASE-HSC-14219-1] c32 N74-27612
OCONNOR, B. J.
 Failure detection and control means for improved
 drift performance of a gimballed platform system
 [NASA-CASE-NFS-23551-1] c04 N76-26175
OCONNOR, E. W.
 Condensate removal device for heat exchanger
 [NASA-CASE-HSC-14143-1] c77 N75-20139
OCONNOR, J. W.
 Fastener stretcher
 [NASA-CASE-GSC-11149-1] c15 N73-30457

ODELL, H. G.
Dual latching solenoid valve Patent
[NASA-CASE-XMS-C5890] c09 N71-23191

ODONNELL, P. B.
Corrosion resistant beryllium Patent
[NASA-CASE-IKW-10327] c17 N71-33408

ODONNELL, T. J.
Spherically-shaped rocket motor Patent
[NASA-CASE-XHQ-01897] c28 N70-35381

OEETEL, G. K.
Fast opening diaphragm Patent
[NASA-CASE-XIA-03660] c15 N71-21060
Measurement of time differences between luminous events Patent
[NASA-CASE-XIA-01987] c23 N71-23976

OFFIK, W. G.
Emergency escape system Patent
[NASA-CASE-IXS-02342] c05 N71-11199

OGDEN, H. F.
Aerodynamic measuring device Patent
[NASA-CASE-XIA-00481] c14 N70-36824
Check valve assembly for a probe Patent
[NASA-CASE-XIA-00128] c15 N70-37925

OGDEN, H. B.
Low temperature aluminum alloy Patent
[NASA-CASE-XHF-02786] c17 N71-20743

OGLE, J. S.
Whole body measurement systems
[NASA-CASE-HSC-13972-1] c52 N74-10975

OHLSCH, J. B.
System for interference signal nulling by polarization adjustment
[NASA-CASE-NFO-13140-1] c32 N75-24982
Conical scan tracking system employing a large antenna
[NASA-CASE-NFO-14009-1] c32 N77-28357

OKANE, J. H.
Pressure suit tie-down mechanism Patent
[NASA-CASE-XMS-00784] c05 N71-12335

CREAR, H. C.
High-Q bandpass resonators utilizing bandstop resonator pairs
[NASA-CASE-GSC-10990-1] c09 N73-26195

OKEEFE, W. J.
Head-up attitude display
[NASA-CASE-ERC-10392] c21 N73-14692

OKELLY, K. P.
Method of fluxless brazing and diffusion bonding of aluminum containing components
[NASA-CASE-HSC-14435-1] c37 N76-18455

OLCOTT, J. W.
Integrated lift/drag controller for aircraft
[NASA-CASE-ARC-10456-1] c05 N75-12930

OLDRIEVE, B. F.
Reinforced metallic composites Patent
[NASA-CASE-XLF-02428] c17 N70-33288
Method of making fiber reinforced metallic composites Patent
[NASA-CASE-XLE-00231] c17 N70-38198
Tantalum modified ferritic iron base alloys
[NASA-CASE-IKW-12095-1] c26 N76-17233

OLIVER, G. D.
Scanning nozzle plating system
[NASA-CASE-NFO-11758-1] c31 N74-23065

OLIVER, B. B.
Multiple reflection conical microwave antenna
[NASA-CASE-NFO-11661] c07 N73-14130

OLIVER, B. L.
Apparatus for applying cover slides
[NASA-CASE-NFO-10575] c03 N72-25019

OLLENDORF, S.
Structural heat pipe
[NASA-CASE-GSC-11619-1] c34 N75-12222

OLLING, B. H.
Radial module space station Patent
[NASA-CASE-XMS-01906] c31 N70-41373

OLSAKEY, H. J.
Laser camera and diffusion filter therefore Patent
[NASA-CASE-NFO-10417] c16 N71-33410

OLSEN, W. A., JR.
Reduced gravity liquid configuration simulator
[NASA-CASE-XLF-02624] c12 N69-39988
Hot wire liquid level detector for cryogenic fluids Patent
[NASA-CASE-XLF-00454] c23 N71-17802

OLSON, W. T.
Inlet deflector for jet engines Patent
[NASA-CASE-XLE-00388] c28 N70-34788

OLTMANS, D. A.
Matched thermistors for microwave power meters Patent
[NASA-CASE-NFO-10348] c10 N71-12554

ONRIL, R. L.
Particulate and aerosol detector
[NASA-CASE-LAR-11434-1] c35 N76-22509

ONRILL, R. W.
Monostable multivibrator with complementary NOR gates Patent
[NASA-CASE-HSC-13492-1] c10 N71-28860
Peak holding circuit for extremely narrow pulses
[NASA-CASE-HSC-14129-1] c33 N75-18479

ONRILLY, W. J.
Portable environmental control system Patent
[NASA-CASE-XMS-09632-1] c05 N71-11203

OREN, V. C.
Fastener stretcher
[NASA-CASE-GSC-11149-1] c15 N73-30457

ORILLION, A. G.
Personal propulsion unit Patent
[NASA-CASE-HFS-20130] c28 N71-27585

ORLIK, F. W.
Pressure seal Patent
[NASA-CASE-NFO-10796] c15 N71-27068

ORLOFF, K. L.
Combined dual scatter, local oscillator laser Doppler velocimeter
[NASA-CASE-ARC-10642-1] c36 N76-14447

ORRISTON, B. A.
Hingeless helicopter rotor with improved stability
[NASA-CASE-ARC-10807-1] c05 N77-17029

ORRNER, J. W.
Method and apparatus for detecting gross leaks Patent
[NASA-CASE-ERC-10033] c14 N71-26672

OROURKE, T. E., JR.
Sealing member and combination thereof and method of producing said sealing member Patent
[NASA-CASE-XMS-01625] c15 N71-23022

ORTH, H. W.
Process for producing dispersion strengthened nickel with aluminum Patent
[NASA-CASE-XLE-06969] c17 N71-24142

OSBERG, J. V.
Miniature muscle displacement transducer
[NASA-CASE-NFO-13519-1] c33 N76-19338

OSMUNDSON, J.
Dually mode locked Nd:YAG laser
[NASA-CASE-GSC-11746-1] c36 N75-19654

OSTROFF, A. J.
Star image motion compensator
[NASA-CASE-LAR-10523-1] c14 N72-22444

OSTROFF, J.
Rotary actuator
[NASA-CASE-NFO-10244] c15 N72-26371

OSULLIVAN, W. J., JR.
Method and apparatus for shock protection Patent
[NASA-CASE-XLA-00482] c15 N70-36409
Self supporting space vehicle Patent
[NASA-CASE-XLA-00117] c31 N71-17680
Thermal control wall panel Patent
[NASA-CASE-XLA-01243] c33 N71-22792
Thermal control panel Patent
[NASA-CASE-XLA-07728] c33 N71-22890

OTHMAN, T. B.
Safety-type locking pin
[NASA-CASE-HFS-18495] c15 N72-11385

OTOSHI, T. Y.
Rotary vane attenuator wherein rotor has orthogonally disposed resistive and dielectric cards
[NASA-CASE-NFO-11418-1] c14 N73-13420

OTTO, G. H.
Synthesis of superconducting compounds by explosive compaction of powders
[NASA-CASE-HFS-20861-1] c18 N73-32437

OUTLAW, R. A.
In situ transfer standard for ultrahigh vacuum gage calibration
[NASA-CASE-LAR-10862-1] c35 N74-15092

OWENS, L. J.
Illumination control apparatus for compensating solar light
[NASA-CASE-KSC-11010-1] c44 N77-15493
Ocean thermal plant
[NASA-CASE-KSC-11034-1] c44 N77-21666
Magnetic electrical connectors for biomedical percutaneous implants

P

- [NASA-CASE-RSC-11030-1] c52 N77-25772
Rotational joint assembly for the prosthetic leg
[NASA-CASE-RSC-11004-1] c54 N77-30749
- PACALA, T. J.**
Charge transfer reaction laser with
preionization means
[NASA-CASE-NFO-13945-1] c36 N77-19418
- PACE, G. D., JR.**
Sun direction detection system
[NASA-CASE-NFO-13722-1] c74 N77-22951
- PACIOBEK, R.**
Heat resistant polymers of oxidized
styrylphosphine
[NASA-CASE-MSC-14903-1] c27 N76-28425
- PACIARD, R. D.**
Semiconductor surface protection material
[NASA-CASE-FEC-10339-1] c18 N73-30532
- PACKIE, F. W.**
Adjustable securing base
[NASA-CASE-MSC-19666-1] c37 N76-31529
- PADILLA, D.**
Method and apparatus for fluffing, separating,
and cleaning fibers
[NASA-CASE-LAR-11224-1] c37 N76-18456
- PAIK, S. Y.**
Parametric microwave noise generator Patent
[NASA-CASE-XER-11019] c09 N71-23598
- PAIK, W. W.**
Apparatus for recovering matter adhered to a
host surface
[NASA-CASE-NPO-11213] c15 N73-20514
- PAINTER, J. H.**
Anti-multipath digital signal detector
[NASA-CASE-LAR-11827-1] c32 N77-10392
- PALANDATI, C. F., JR.**
Prevention of pressure build-up in
electrochemical cells Patent
[NASA-CASE-IGS-01419] c03 N70-41864
- PALMER, E. I.**
Apparatus for testing a pressure responsive
instrument Patent
[NASA-CASE-XMR-04134] c14 N71-23755
- PALSINGH, S.**
Anti-gravity device
[NASA-CASE-MFS-22758-1] c70 N75-26789
- PAN, F. H.**
A dc-coupled noninverting one-shot Patent
[NASA-CASE-INP-09450] c10 N71-18723
- PAOLINI, J. J.**
Full flow with shut off and selective drainage
control valve Patent application
[NASA-CASE-FRC-10208] c15 N70-10867
- PAPILL, S. S.**
Low viscosity magnetic fluid obtained by the
colloidal suspension of magnetic particles
Patent
[NASA-CASE-XIE-01512] c12 N70-40124
- PAPER, J. J.**
Liquid storage tank venting device for zero
gravity environment Patent
[NASA-CASE-XLE-01449] c15 N70-41646
- PAPER, J. J.**
Capacitor and method of making same Patent
[NASA-CASE-LEW-10364-1] c09 N71-13522
- PAPER, J. J.**
Fluid dispensing apparatus and method Patent
[NASA-CASE-XLE-01182] c27 N71-15635
- PARDON, C. T.**
Telemetry synchronizer
[NASA-CASE-GSC-11868-1] c17 N76-22245
- PARESCHE, F.**
Resistive anode image converter
[NASA-CASE-BQN-10876-1] c33 N76-27473
- PARK, J. J.**
Method of making tubes Patent
[NASA-CASE-IGS-04175] c15 N71-18579
- PARKER, D. L.**
An improved method and apparatus for use in
examining the lattice of a semiconductor wafer
by X-ray diffraction
[NASA-CASE-MFS-23315-1] c76 N76-32029
- PARKER, G. L.**
Elimination of frequency shift in a multiplex
communication system Patent
[NASA-CASE-INP-01306] c07 N71-20814
- PARKER, G. L.**
High speed phase detector Patent
[NASA-CASE-INP-01306-2] c09 N71-24596
- PARKER, G. L.**
Optical binocular scanning apparatus
[NASA-CASE-NPO-11002] c14 N72-22441
- PARKER, J. A.**
Hydraulic drain means for servo-systems
[NASA-CASE-NFO-10316-1] c37 N77-22479
- PARKER, J. A.**
Intumescent paints Patent
[NASA-CASE-ARC-10099-1] c18 N71-15469
- PARKER, J. A.**
Modified polyurethane foams for fuel-fire Patent
[NASA-CASE-ARC-10098-1] c06 N71-24739
- PARKER, J. A.**
Intumescent composition, foamed product prepared
therewith, and process for making same
[NASA-CASE-ARC-10304-1] c18 N73-26572
- PARKER, J. A.**
Flexible fire retardant polyisocyanate modified
neoprene foam
[NASA-CASE-ARC-10180-1] c27 N74-12814
- PARKER, J. A.**
Chromato-fluorographic drug detector
[NASA-CASE-ARC-10633-1] c25 N74-26947
- PARKER, J. A.**
Intumescent composition, foamed product prepared
therewith and process for making same
[NASA-CASE-ARC-10304-2] c27 N74-27037
- PARKER, J. A.**
Fiber modified polyurethane foam for ballistic
protection
[NASA-CASE-ARC-10714-1] c27 N76-15310
- PARKER, J. A.**
Transparent fire resistant polymeric structures
[NASA-CASE-ARC-10813-1] c27 N76-16230
- PARKER, J. A.**
Honeycomb-laminate composite structure
[NASA-CASE-ARC-10913-1] c24 N76-16286
- PARKER, J. A.**
Low density bismaleimide-carbon microballoon
composites
[NASA-CASE-ARC-11040-1] c24 N77-19173
- PARKER, L. C.**
Safe-arm initiator Patent
[NASA-CASE-LAB-10372] c09 N71-18599
- PARKER, O. J.**
Despin weight release Patent
[NASA-CASE-XLA-00679] c15 N70-38601
- PARKER, O. J.**
Spacecraft separation system for spinning
vehicles and/or payloads Patent
[NASA-CASE-XLA-02132] c31 N71-10582
- PARKER, O. J.**
Flared tube strainer
[NASA-CASE-XLA-05056] c15 N72-11389
- PARKER, R. J.**
Method of improving the reliability of a rolling
element system Patent
[NASA-CASE-XLE-02999] c15 N71-16052
- PARKER, R. J.**
Low mass rolling element for bearings
[NASA-CASE-LEW-11087-1] c15 N73-30458
- PARKER, R. J.**
Method of making rolling element bearings
[NASA-CASE-LEW-11087-2] c37 N74-15128
- PARKER, R. J.**
Hollow rolling element bearings
[NASA-CASE-LEW-11087-3] c37 N74-21064
- PARKLEY, R. I.**
Aerodynamic protection for space flight vehicles
Patent
[NASA-CASE-XNP-02507] c31 N71-17679
- PARRA, G. I.**
Angle detector
[NASA-CASE-ARC-11036-1] c35 N77-11364
- PARRON, W. E.**
Electronic checkout system for space vehicles
Patent
[NASA-CASE-XKS-08012-2] c31 N71-15566
- PARRON, W. E.**
Percutaneous connector device
[NASA-CASE-RSC-10849-1] c52 N77-14738
- PARTSCH, V. H.**
Purge device for thrust engines Patent
[NASA-CASE-XMS-04826] c28 N71-28849
- PASCIUTTI, E. E.**
Protection for energy conversion systems
[NASA-CASE-IGS-04808] c03 N69-25146
- PASCIUTTI, E. E.**
Inverter with means for base current shaping for
sweeping charge carriers from base region Patent
[NASA-CASE-IGS-06226] c10 N71-25950
- PASCIUTTI, E. E.**
A dc to ac to dc converter having transistor
synchronous rectifiers
[NASA-CASE-GSC-11126-1] c09 N72-25253
- PASIRBB, R. F.**
GaAs solar detector using manganese as a doping
agent Patent
[NASA-CASE-INP-01328] c26 N71-18064
- PASSMAN, H. H.**
Heat conductive resiliently compressible
structure for space electronics package
modules Patent
[NASA-CASE-MSC-12389] c33 N71-29052
- PATE, W. E.**
Color perception tester
[NASA-CASE-KSC-10278] c05 N72-16015
- PATON, W. J.**
Flammability test chamber Patent
[NASA-CASE-RSC-10126] c11 N71-24985

PATTEN, C. W.
Method and apparatus for attaching physiological monitoring electrodes Patent
[NASA-CASE-XFR-07658-1] c05 N71-26293

PATTERSON, J. C., JR.
Wingtip vortex dissipator for aircraft
[NASA-CASE-IAR-11645-1] c02 N77-10001

PATTERSON, W. J.
Synthesis of siloxane-containing epoxy polymers Patent
[NASA-CASE-MFS-13994-1] c06 N71-11240
Siloxane containing epoxide compounds
[NASA-CASE-MFS-13994-2] c06 N72-25148
Silphenylenesiloxane polymers having in-chain perfluoralkyl groups
[NASA-CASE-MFS-20979] c06 N72-25151
Polymerizable disiloxanes having in-chain perfluoralkyl groups
[NASA-CASE-MFS-20979-2] c06 N73-32030

PAULI, P. A.
Attitude controls for VEC aircraft Patent
[NASA-CASE-XAC-08972] c02 N71-20570

PAULKOVICH, J.
Apparatus for measuring current flow Patent
[NASA-CASE-XGS-02439] c14 N71-19431
Coulometer and third electrode battery charging circuit Patent
[NASA-CASE-GSC-10487-1] c03 N71-24719

PAULI, S.
Variable frequency magnetic multivibrator Patent
[NASA-CASE-XGS-00458] c09 N70-38604
Variable frequency magnetic multivibrator Patent
[NASA-CASE-XGS-00131] c09 N70-38995

PAVLICS, P.
Resilient wheel Patent
[NASA-CASE-MFS-13929] c15 N71-27091

PAULIK, E. V.
Plasma device feed system Patent
[NASA-CASE-XIE-02902] c25 N71-21694
Ion thruster with a combination keeper electrode and electron baffle
[NASA-CASE-NFO-11880] c28 N73-24783
Improved nozzle for use with abrasive and/or corrosive materials
[NASA-CASE-NFO-13823-1] c37 N77-17466

PEARSON, A. O.
Measurement of gas production of microorganisms
[NASA-CASE-LAR-11326-1] c35 N75-33368

PECKHAM, A.
Two-component ceramic coating for silica insulation
[NASA-CASE-MSC-14270-1] c27 N76-22377
Three-component ceramic coating for silica insulation
[NASA-CASE-MSC-14270-2] c27 N76-23426

PECKHAM, V. A., JR.
Sample collecting impact bit Patent
[NASA-CASE-XNP-01412] c15 N70-42034

PEDERSON, C. W.
Low distortion automatic phase control circuit
[NASA-CASE-MFS-21671-1] c33 N74-22885

PERLGRIN, M. L.
Shell side liquid metal boiler
[NASA-CASE-NFO-10831] c33 N72-20915

PERE, C. B.
Connector strips-positive, negative and T tabs
[NASA-CASE-XGS-01395] c03 N69-21539

PEGDEN, C. D.
Multiple in-line docking capability for rotating space stations
[NASA-CASE-MFS-20855-1] c15 N77-10112

PELLERIN, C. J., JR.
Two axis fluxgate magnetometer Patent
[NASA-CASE-GSC-10441-1] c14 N71-27325

PENQUE, M. J.
Varactor high level mixer
[NASA-CASE-XGS-02171] c09 N69-24324

PEOPLES, J. A.
Multiway vortex valve system Patent
[NASA-CASE-XNP-04709] c15 N71-15609

PERKINS, G. S.
Detenting servomotor Patent
[NASA-CASE-XNP-06936] c15 N71-24695
Ball screw linear actuator
[NASA-CASE-NFO-11222] c15 N72-25456
Improved nozzle for use with abrasive and/or corrosive materials
[NASA-CASE-NFO-13823-1] c37 N77-17466

Sun tracking solar energy collector
[NASA-CASE-NFO-13921-1] c44 N77-24590

PERKINS, B.
System for imposing directional stability on a rocket-propelled vehicle
[NASA-CASE-MFS-21311-1] c20 N76-21275

PERKINS, P. J., JR.
Cryogenic insulation system Patent
[NASA-CASE-XLE-04222] c23 N71-22881
Insulation system Patent
[NASA-CASE-XLE-02647] c18 N71-23658

PERLMAN, H.
Linear three-tap feedback shift register Patent
[NASA-CASE-NFO-10351] c08 N71-12503
Binary sequence detector Patent
[NASA-CASE-XNP-05415] c08 N71-12505
Digital function generator
[NASA-CASE-NFO-11104] c08 N72-22165
Feedback shift register with states decomposed into cycles of equal length
[NASA-CASE-NFO-11082] c08 N72-22167
Pseudonoise sequence generators with three tap linear feedback shift registers
[NASA-CASE-NFO-11406] c08 N73-12175
A m-ary linear feedback shift register with binary logic
[NASA-CASE-NFO-11868] c10 N73-20254
System for generating timing and control signals
[NASA-CASE-NFO-13125-1] c33 N75-19519
Nonlinear nonsingular feedback shift registers
[NASA-CASE-NFO-13451-1] c33 N76-14373

PERLMUTTER, H.
Device for directionally controlling electromagnetic radiation Patent
[NASA-CASE-XLE-01716] c09 N70-40234

PERRY, C. L.
Metabolic analyzer
[NASA-CASE-MFS-21415-1] c52 N74-20728

PERRY, G. D.
Zero gravity apparatus Patent
[NASA-CASE-XNP-06515] c14 N71-23227

PERRY, W. E.
Field sequential stereo television
[NASA-CASE-MSC-12616-1] c32 N74-32601
Optical conversion method
[NASA-CASE-MSC-12618-1] c74 N76-18917

PERSEK, C. T.
Clamping assembly for inertial components Patent
[NASA-CASE-XNS-02184] c15 N71-20813
Circuit board package with wedge shaped covers
[NASA-CASE-MFS-21919-1] c10 N73-25243

PESHAN, G. J.
Shock absorbing support and restraint means Patent
[NASA-CASE-XNS-01240] c05 N70-35152

PETERS, D. A.
Hingeless helicopter rotor with improved stability
[NASA-CASE-ARC-10807-1] c05 N77-17029

PETERS, H. B.
Atomic standard with variable storage volume
[NASA-CASE-GSC-11895-1] c35 N76-15436

PETERS, L., JR.
Horn antenna having V-shaped corrugated slots
[NASA-CASE-LAR-11112-1] c32 N76-15330

PETERS, P. B.
Germanium coated microbridge and method
[NASA-CASE-MFS-23274-1] c76 N76-30084

PETERS, R. L.
CRT blanking and brightness control circuit
[NASA-CASE-KSC-10647-1] c10 N72-31273

PETERS, R. W.
Two component bearing Patent
[NASA-CASE-XIA-00013] c15 N71-29136

PETERSEN, H. I.
Four phase logic systems
[NASA-CASE-MSC-14240-1] c33 N75-14957

PETERSEN, H. W.
Adjustable mount for a trihedral mirror Patent
[NASA-CASE-INT-08907] c23 N71-29123

PETERSON, E. W.
Canopus detector including automotive gain control of photomultiplier tube Patent
[NASA-CASE-XNP-03914] c21 N71-10771

PETERSON, W. C.
Ultraviolet atomic emission detector
[NASA-CASE-RQB-10756-1] c14 N74-25428

PETERSON, W. E., JR.
Shrink-fit gas valve Patent
[NASA-CASE-XGS-00587] c15 N70-35087

PETERSON, P. D.
Portable environmental control system Patent
[NASA-CASE-XMS-09632-1] c05 N71-11203

PETERSON, S. I.
Meteoroid detector
[NASA-CASE-LAR-10483-1] c14 N73-32327

PETERSON, V. S.
Flow angle sensor and read out system Patent
[NASA-CASE-XLE-04503] c14 N71-24864
Solid state remote circuit selector switch
[NASA-CASE-LEW-10387] c09 N72-22201
Fine particulate capture device
[NASA-CASE-LEW-11583-1] c37 N74-13199
Low level signal limiter
[NASA-CASE-XLE-04791] c32 N74-22096

PETERSON, W. A.
Folded traveling wave maser structure Patent
[NASA-CASE-XNP-05219] c16 N71-15550
Superconducting magnet Patent
[NASA-CASE-XNP-06503] c23 N71-29049

PETERSON, W. D.
Automatic frequency discriminators and control
for a phase-lock loop providing frequency
preset capabilities Patent
[NASA-CASE-XNF-08665] c10 N71-19467

PETERSSEN, B. E.
Medical subject monitoring systems
[NASA-CASE-MSC-14180-1] c52 N76-14757

PETRASEK, D. W.
Reinforced metallic composites Patent
[NASA-CASE-XLE-02428] c17 N70-33288
Method of making fiber reinforced metallic
composites Patent
[NASA-CASE-XLE-00231] c17 N70-38198
Reinforced metallic composites Patent
[NASA-CASE-XLE-00228] c17 N70-38490
Method of making fiber composites
[NASA-CASE-LEW-10424-2-2] c18 N72-25539

PETRICK, E. B.
Variable thrust ion engine utilizing thermally
decomposable solid fuel Patent
[NASA-CASE-XNP-00923] c28 N70-36802

PETYNIA, W. W.
Space and atmospheric reentry vehicle Patent
[NASA-CASE-XCS-00260] c31 N70-37924
Space vehicle system
[NASA-CASE-MSC-12561-1] c18 N76-17185

PEYTON, J.
Wideband heterodyne receiver for laser
communication system
[NASA-CASE-GSC-12053-1] c32 N77-28346

PEZDIRTZ, G. F.
Method and apparatus for shock protection Patent
[NASA-CASE-XIA-00482] c15 N70-36409
Imidazopyrrolone/imide copolymers Patent
[NASA-CASE-XLA-08802] c06 N71-11238
Dosimeter for high levels of absorbed radiation
Patent
[NASA-CASE-XIA-03645] c14 N71-20430
Solid state thermal control polymer coating
Patent
[NASA-CASE-XLA-01745] c33 N71-28903

PFAPF, H.
Swivel support for gas bearings Patent
[NASA-CASE-XNF-07808] c15 N71-23812

PFIPFNER, H. J.
Bootstrap unloader Patent
[NASA-CASE-XNF-05768] c09 N71-12516

PFLEGER, R. O.
Spherical shield Patent
[NASA-CASE-XNP-01855] c15 N71-28937

PHILIPP, W. B.
Selective nickel deposition
[NASA-CASE-LEW-10965-1] c15 N72-25452
Production of pure metals
[NASA-CASE-LEW-10906-1] c25 N74-30502
Process for making anhydrous metal halides
[NASA-CASE-LEW-11860-1] c37 N76-18458

PHILLIPS, A. E.
Technique of duplicating fragile core
[NASA-CASE-XIA-07829] c15 N72-16329

PHILLIPS, B. I. S.
File card marker Patent
[NASA-CASE-XLA-02705] c08 N71-15908

PHILLIPS, E. C., JR.
Method of forming a wick for a heat pipe
[NASA-CASE-NFO-13391-1] c34 N76-27515

PHILLIPS, W. B.
Variable-geometry winged reentry vehicle Patent
[NASA-CASE-XLA-00241] c31 N70-37986
Station keeping of a gravity gradient stabilized
satellite Patent
[NASA-CASE-XLA-03132] c31 N71-22969

PHILLIPS, W. B.
Shell side liquid metal boiler
[NASA-CASE-NFO-10831] c33 N72-20915
High temperature resistant cermet and ceramic
compositions
[NASA-CASE-NFO-13690-1] c27 N76-13294
Cermet composition and method of fabrication
[NASA-CASE-NFO-13120-1] c27 N76-15311
High temperature oxidation resistant cermet
compositions
[NASA-CASE-NFO-13666-1] c27 N77-13217
Improved nozzle for use with abrasive and/or
corrosive materials
[NASA-CASE-NFO-13823-1] c37 N77-17466
Nuclear thermionic converter
[NASA-CASE-NFO-13121-1] c73 N77-18891

PHILIBER, G. A., JR.
Separation simulator Patent
[NASA-CASE-XKS-04631] c10 N71-23663
Internal work light Patent
[NASA-CASE-XKS-05932] c09 N71-26787
Universal environment package with sectional
component housing
[NASA-CASE-KSC-10031] c15 N72-22486
Pressurized lighting system
[NASA-CASE-KSC-10644] c09 N72-27227
Character indicating display device
[NASA-CASE-XKS-00348] c09 N73-14215

PIASECKI, L. B.
Apparatus and method for control of a solid
fueled rocket vehicle Patent
[NASA-CASE-XNP-00217] c28 N70-38181

PICCILOLO, G. L.
Flavin coenzyme assay
[NASA-CASE-GSC-10565-1] c06 N72-25149
Method of detecting and counting bacteria in
body fluids
[NASA-CASE-GSC-11092-2] c04 N73-27052
Automatic instrument for chemical processing to
detect microorganisms in biological samples by
measuring light reactions
[NASA-CASE-GSC-11169-2] c05 N73-32011
Method of detecting and counting bacteria
[NASA-CASE-GSC-11917-2] c51 N76-29691
Detection of microbial infection in blood and
antibiotic determinations
[NASA-CASE-GSC-12045-1] c52 N77-18733
Application of luciferase assay for ATP to
antimicrobial drug susceptibility
[NASA-CASE-GSC-12039-1] c51 N77-22794
Determination of antimicrobial susceptibilities
of infected urines without isolation
[NASA-CASE-GSC-12046-1] c52 N77-26797

PIERCE, R. B.
Propellant grain for rocket motors Patent
[NASA-CASE-IGS-03556] c27 N70-35534

PINCKNEY, R. B.
System for monitoring the presence of neutrals
in a stream of ions Patent
[NASA-CASE-XNF-02592] c24 N71-20518

PINCKNEY, S. E.
Static pressure probe
[NASA-CASE-LAR-11552-1] c35 N76-14429

PINCUS, B. B.
Scanning aspect sensor employing an apertured
disc and a commutator
[NASA-CASE-IGS-08266] c14 N69-27432

PINKEL, I. I.
Reduced gravity liquid configuration simulator
[NASA-CASE-XLE-02624] c12 N69-39588

PINSON, G. T.
Guide for a typewriter
[NASA-CASE-NFS-15218-1] c37 N77-19457

PIPER, D. L.
High voltage pulse generator Patent
[NASA-CASE-BSC-12178-1] c09 N71-13518

PITELLI, E. B.
Transverse piezoresistance and pinch effect
electromechanical transducers Patent
[NASA-CASE-BEC-10088] c26 N71-25490

PITTS, D. B.
Method for manufacturing mirrors in zero gravity
environment
[NASA-CASE-BSC-12611-1] c12 N76-15189

PITTS, P. L.
Electronic strain-level counter
[NASA-CASE-LAR-10756-1] c32 N73-26910

PITTS, W. C.
Two force component measuring device Patent
[NASA-CASE-XAC-04886-1] c14 N71-20439

PIVIBOTTO, T. J.
Inert gas metallic vapor laser
[NASA-CASE-NFO-13449-1] c36 N75-32441

PIZZICK, D. E.
Connector
[NASA-CASE-LAR-11709-1] c37 N76-27567

PLAKAS, C. J.
Firefly pump-metering system
[NASA-CASE-GSC-10218-1] c15 N72-21465

PLANCHON, J. A., JR.
Conically shaped cavity radiometer with a dual
purpose cone winding Patent
[NASA-CASE-XNF-09701] c14 N71-26475

PLANOWSKI, S. C.
Traversing probe Patent
[NASA-CASE-XFE-02007] c12 N71-24692

PLATT, P. K.
Cryogenic connector for vacuum use Patent
[NASA-CASE-XGS-02441] c15 N70-41629

PLAZER, D. J.
Instrument for measuring torsional creep and
recovery Patent
[NASA-CASE-XLI-01481] c14 N71-10781

PLEASANTS, J. E.
Inflatable support structure Patent
[NASA-CASE-XLP-01731] c32 N71-21045

Vortex breach high pressure gas generator
[NASA-CASE-LAR-10549-1] c31 N73-13898

PLITT, K. F.
Spacecraft battery seals
[NASA-CASE-XCS-03864] c15 N69-24320

PODGOBORSKI, T. J.
Method of forming shrink-fit compression seal
[NASA-CASE-LAR-11563-1] c37 N77-23482

POESCHEL, B. L.
Ion thruster
[NASA-CASE-LFW-10770-1] c28 N72-22770

POGOBZELSKI, P. S.
Apparatus for welding sheet material
[NASA-CASE-XNS-01330] c37 N75-27376

POHL, E. O.
Two-step rocket engine bipropellant valve Patent
[NASA-CASE-XNS-04890-1] c15 N70-22192

POHL, J. G.
Portable, linear-focused solar thermal energy
collecting system
[NASA-CASE-NFO-13734-1] c44 N76-26690

Three-dimensional tracking solar energy
concentrator and method for making same
[NASA-CASE-NFO-13736-1] c44 N77-32583

POHN, A. V.
Magnetometer
[NASA-CASE-LAR-11617-2] c35 N77-17430

POLHAUS, E. C.
Variable sweep wing configuration Patent
[NASA-CASE-XIA-00230] c02 N70-33255

Variable sweep aircraft wing Patent
[NASA-CASE-XIA-00350] c02 N70-38011

Variable sweep aircraft Patent
[NASA-CASE-XIA-03659] c02 N71-11041

POLHEMUS, J. T.
A condition sensor system and method
[NASA-CASE-MSC-14805-1] c35 N76-26448

POLLACK, I.
Etching of aluminum for bonding Patent
[NASA-CASE-XNF-02303] c17 N71-23828

Dye penetrant for surfaces subsequently
contacted by liquid oxygen Patent
[NASA-CASE-XNF-02221] c18 N71-27170

POLLACK, J. I.
High powered arc electrodes
[NASA-CASE-IFW-11162-1] c33 N74-12913

POLLARD, R. A.
Rescue litter flotation assembly Patent
[NASA-CASE-XNS-04170] c05 N71-22748

POLLOCK, G. E.
Gas chromatograph injection system
[NASA-CASE-AEC-10344-1] c14 N72-21433

Gas chromatograph injection system
[NASA-CASE-AEC-10344-2] c35 N75-26334

POLSTORFF, W. J.
Simulator for practicing the mating of an
observer-controlled object with a target
[NASA-CASE-MFS-23052-2] c14 N77-18179

POOL, S. L.
Medical subject monitoring systems
[NASA-CASE-MSC-14180-1] c52 N76-14757

POPE, A. M.
Zero gravity separator Patent
[NASA-CASE-XLE-00586] c15 N71-15968

POPE, J. M.
Miniature ingestible telemeter devices to
measure deep-body temperature
[NASA-CASE-ARC-10583-1] c52 N76-29894

POPE, W. L.
Low gravity phase separator
[NASA-CASE-MSC-14773-1] c31 N75-32262

POPICK, H.
Laser apparatus for removing material from
rotating objects Patent
[NASA-CASE-MFS-11279] c16 N71-20400

POPHA, D. C.
Recovery of potable water from human wastes in
below-G conditions Patent
[NASA-CASE-XLA-03213] c05 N71-11207

PORADSK, J. C.
Process for conditioning tanned sharkskin and
articles made therefrom Patent
[NASA-CASE-XNS-09691-1] c18 N71-15545

Process for removing sulfur dioxide from gas
streams
[NASA-CASE-MSC-16299-1] c45 N77-31668

PORTER, R. M.
Liquid rocket system Patent
[NASA-CASE-XNF-00610] c28 N70-36910

Zero gravity starting means for liquid
propellant motors Patent
[NASA-CASE-XNF-01390] c28 N70-41275

Force-balanced, throttle valve Patent
[NASA-CASE-NFO-10808] c15 N71-27432

PORTER, W. A.
An improved method and apparatus for use in
examining the lattice of a semiconductor wafer
by X-ray diffraction
[NASA-CASE-MFS-23315-1] c76 N76-32029

PORTNOY, W. A.
Insulated electrocardiographic electrodes
[NASA-CASE-MSC-14339-1] c05 N75-24716

POSCHENREDEH, W. P.
Analytical photoionization mass spectrometer
with an argon gas filter between the light
source and monochromator Patent
[NASA-CASE-LAR-10180-1] c06 N71-13461

POSNER, E. C.
Phase-locked loop with sideband rejecting
properties Patent
[NASA-CASE-XNF-02723] c07 N70-41680

Data compressor Patent
[NASA-CASE-XNF-04067] c08 N71-22707

Apparatus for deriving synchronizing pulses from
pulses in a single channel PCM communications
system
[NASA-CASE-NFO-11302-1] c07 N73-13149

Method and apparatus for a single channel
digital communications system
[NASA-CASE-NFO-11302-2] c32 N74-10132

POSTHA, E. W.
Thrust measurement
[NASA-CASE-XNS-05731] c35 N75-29382

POTATE, W. B.
Multiparameter vision testing apparatus
[NASA-CASE-MSC-13601-2] c54 N75-27759

POTTER, A. E., JR.
Multispectral imaging system
[NASA-CASE-MSC-12404-1] c23 N73-13661

POTTER, L. E.
Thermocouple installation
[NASA-CASE-NFO-13540-1] c35 N77-14409

POTTER, M. B.
Method and apparatus for battery charge control
Patent
[NASA-CASE-IGS-05432] c03 N71-19438

POTTER, P. D.
Cassegrainian antenna subreflector flange for
suppressing ground noise Patent
[NASA-CASE-XNF-00683] c09 N70-35425

Dual mode horn antenna Patent
[NASA-CASE-XNF-01057] c07 N71-15907

Dichroic plate
[NASA-CASE-NFO-13506-1] c35 N76-15435

POUCHOT, W. D.
Self-adjusting multisegment, deployable, natural

circulation radiator Patent
[NASA-CASE-IBQ-03673] c33 N71-29046

POVIBELLI, L. A.
Burning rate control of solid propellants Patent
[NASA-CASE-ILF-03494] c27 N71-21819

POWELL, C. A., JR.
Instrument for measuring the dynamic behavior of liquids Patent
[NASA-CASE-XIA-05541] c12 N71-26387

POWELL, J. A.
Process for fabricating SiC semiconductor devices
[NASA-CASE-LEW-12094-1] c76 N76-25049

POWELL, J. D.
Iodine generator for reclaimed water purification
[NASA-CASE-HSC-14632-1] c54 N75-25594

POWELL, W. B.
Thermocouple installation
[NASA-CASE-NFO-13540-1] c35 N77-14409

POWELL, W. F., JR.
Target acquisition antenna
[NASA-CASE-GSC-10064-1] c10 N72-22235

POWER, J. L.
An ion exchange nuclear reactor
[NASA-CASE-LEW-11645-2] c22 N73-28660

Ion beam thruster shield
[NASA-CASE-LEW-12082-1] c20 N77-10148

POWERS, E. I.
Thermal control system for a spacecraft modular housing
[NASA-CASE-GSC-11018-1] c31 N73-30829

POZSCHNY, R. B.
Apparatus and method for skin packaging articles
[NASA-CASE-HFS-20855] c15 N73-27405

PRESCOTT, W. A.
Liquid-gas separation system Patent
[NASA-CASE-XMS-01624] c15 N70-40062

PRESTLEY, L. L.
Measurement of plasma temperature and density using radiation absorption
[NASA-CASE-ARC-10598-1] c75 N74-30156

PRESTON, G. M.
Electronic checkout system for space vehicles Patent
[NASA-CASE-IKS-08012-2] c31 N71-15566

PRESTON, G. W.
Satellite communication system Patent
[NASA-CASE-INP-02389] c07 N71-28900

PRICE, A. G.
Attitude sensor
[NASA-CASE-LAR-10586-1] c19 N74-15089

PRICE, B. W.
Gravity gradient attitude control system Patent
[NASA-CASE-GSC-10555-1] c21 N71-27324

PRICE, P.
Apparatus for establishing flow of a fluid mass having a known velocity
[NASA-CASE-HFS-21424-1] c34 N74-27730

PRICE, S. B.
Surface roughness detector Patent
[NASA-CASE-XIA-00203] c14 N70-34161

PRIDE, J. D., JR.
Remote controlled tubular disconnect Patent
[NASA-CASE-XLA-01396] c03 N71-12259

PRIBBE, G. W.
Relief container
[NASA-CASE-XMS-06761] c05 N69-23192

PRIOLETTI, J. A.
Inductive liquid level detection system Patent
[NASA-CASE-XIE-01609] c14 N71-10500

PRITCHARD, E. B.
Orbital and entry tracking accessory for globes
[NASA-CASE-LAR-10626-1] c19 N74-21015

PRITCHARD, H. O.
Reduction of nitric oxide emissions from a combustor
[NASA-CASE-ARC-10814-2] c25 N77-31260

PROCH, G. E.
Digital transmitter for data bus communications system
[NASA-CASE-HSC-14558-1] c32 N75-21486

Low distortion receiver for bi-level baseband PCM waveforms
[NASA-CASE-HSC-14557-1] c32 N76-16249

PROENSEY, J. B.
Method for making a heat insulating and ablative structure
[NASA-CASE-XMS-01108] c15 N69-24322

PROFFIT, E. L.
Hydrogen fire detection system with logic

circuit to analyze the spectrum of temporal variations of the optical spectrum
[NASA-CASE-HFS-13130] c10 N72-17173

PROGAR, D. J.
Process for applying black coating to metals Patent
[NASA-CASE-XIA-06199] c15 N71-24875

Polyimide adhesives
[NASA-CASE-LAR-11397-1] c27 N75-29263

Polyimide adhesives
[NASA-CASE-LAR-12181-1] c27 N77-15192

PROK, G. M.
Apparatus for making a metal slurry product Patent
[NASA-CASE-XLE-00010] c15 N70-33382

PROKOPIUS, P. E.
Flow measuring apparatus
[NASA-CASE-LEW-12078-1] c35 N75-30503

PROUETT, B. J.
Apparatus for testing a pressure responsive instrument Patent
[NASA-CASE-INP-04134] c14 N71-23755

PRYOR, D. E.
Inflatable transpiration cooled nozzle
[NASA-CASE-HFS-20619] c28 N72-11708

PRYOR, P. P., JR.
Computerized system for translating a torch head
[NASA-CASE-HFS-23620-1] c37 N77-24497

PRZYBYLSZEWSKI, J. S.
Method and apparatus for sputtering utilizing an apertured electrode and a pulsed substrate bias
[NASA-CASE-LEW-10920-1] c17 N73-24565

PUCCHIELLI, A. A.
Three-axis controller Patent
[NASA-CASE-IAC-01404] c05 N70-41581

Transfer valve Patent
[NASA-CASE-IAC-01158] c15 N71-23051

PUCILLO, G. L.
Integrated thermoelectric generator/space antenna combination
[NASA-CASE-XEB-09521] c09 N72-12136

PULLING, R. C.
Space suit
[NASA-CASE-HSC-12609-1] c05 N73-32012

PURCELL, T. B., JR.
Electric storage battery
[NASA-CASE-NFO-11021] c03 N72-20032

PUTHAN, D. F.
Electrolytic cell structure
[NASA-CASE-LAR-11042-1] c33 N75-27252

QUATINETS, H.
Method for producing fiber reinforced metallic composites Patent
[NASA-CASE-XLE-03925] c18 N71-22894

Gas purged dry box glove Patent
[NASA-CASE-XLE-02531] c05 N71-23080

Process for producing dispersion strengthened nickel with aluminum Patent
[NASA-CASE-XLE-06969] c17 N71-24142

Method of producing refractory composites containing tantalum carbide, hafnium carbide, and hafnium boride Patent
[NASA-CASE-XLE-03940] c18 N71-26153

Refractory metal base alloy composites
[NASA-CASE-XLE-03940-2] c17 N72-28536

QUATTRORE, P. D.
Exposure system for animals Patent
[NASA-CASE-XAC-05333] c11 N71-22875

QUINN, R. B.
Laser for frequencies in the 7-20 GHz range
[NASA-CASE-NFO-11437] c16 N72-28521

RADNOSKY, H. I.
Shock absorbing support and restraint means Patent
[NASA-CASE-XMS-01240] c05 N70-35152

Life preserver Patent
[NASA-CASE-XMS-00864] c05 N70-36493

Inflatable radar reflector unit Patent
[NASA-CASE-XMS-00893] c07 N70-40063

Life raft stabilizer
[NASA-CASE-HSC-12393-1] c02 N73-26006

High visibility air sea rescue panel
[NASA-CASE-HSC-12564-1] c54 N76-15792

RAGGIO, C. W., JR.
Steerable solid propellant rocket motor Patent

[NASA-CASE-IXF-00234] c28 N70-38645
BAINBY, R. W.
 High speed flight vehicle control Patent
 [NASA-CASE-XIA-08967] c02 N71-27088
BAINWATER, L. L.
 Collapsible antenna boom and transmission line
 Patent
 [NASA-CASE-MFS-20068] c07 N71-27191
BAHBY, R. I.
 Depositing semiconductor films utilizing a
 thermal gradient
 [NASA-CASE-XKS-04614] c15 N69-21460
 Active microwave irises and windows
 [NASA-CASE-IPR-10513-1] c07 N72-25170
 Thin film microwave iris
 [NASA-CASE-IAR-10511-1] c09 N72-29172
BAHNE, P. B.
 Flexible conductive disc electrode Patent
 [NASA-CASE-FEC-10029] c09 N71-24618
 Method of removing insulated material from
 insulated wires
 [NASA-CASE-FEC-10038] c15 N72-20444
 Method of making dry electrodes
 [NASA-CASE-FEC-10029-2] c05 N72-25121
BANDALL, J. C.
 Attitude control for spacecraft Patent
 [NASA-CASE-IXF-02982] c31 N70-41855
BAHRY, J. F.
 Buoyant anti-slosh system Patent
 [NASA-CASE-XIA-04605] c32 N71-16106
BAROSA, F. L.
 Parasitic suppressing circuit
 [NASA-CASE-FEC-10403-1] c10 N73-26228
BAROZA, R. J.
 Reversible current control apparatus Patent
 [NASA-CASE-XIA-09371] c10 N71-18724
BASHUSSEN, H. F.
 Transparent switchboard
 [NASA-CASE-MSC-13746-1] c10 N73-32143
BASQUIN, J. B.
 Angular measurement system Patent
 [NASA-CASE-IXF-00447] c14 N70-33179
 Electro-optical alignment control system Patent
 [NASA-CASE-IXF-00908] c14 N70-40238
 Laser coclant and ultraviolet filter
 [NASA-CASE-MFS-20180] c16 N72-12440
 Underwater space suit pressure control regulator
 [NASA-CASE-MFS-20332] c05 N72-20097
 Apparatus for making diamonds
 [NASA-CASE-MFS-20698] c15 N72-20446
 High temperature furnace for melting
 materials
 [NASA-CASE-MFS-20710] c11 N72-23215
 Process for making diamonds
 [NASA-CASE-MFS-20698-2] c15 N73-19457
 Underwater space suit pressure control regulator
 [NASA-CASE-MFS-20332-2] c05 N73-25125
 Digital computing cardiometer
 [NASA-CASE-MFS-20284-1] c52 N74-12778
BATAJCKAN, A. F.
 Solar cell shingle
 [NASA-CASE-LEW-12587-1] c44 N77-31601
BATCLIFF, L. F.
 Latch mechanism
 [NASA-CASE-MSC-12549-1] c37 N74-27903
BAVAS, R. J.
 Transistor drive regulator Patent
 [NASA-CASE-LEW-10233] c10 N71-27126
BAVENHALL, R.
 Platform for a swing root turbomachinery blade
 [NASA-CASE-LEW-12312-1] c07 N77-32148
BAWSON, J.
 Display research collision warning system
 [NASA-CASE-BQH-10703] c21 N73-13643
BAY, W. L.
 Remote fire stack igniter
 [NASA-CASE-MFS-21675-1] c25 N74-33378
BAYLE, W. D.
 Electric propulsion engine test chamber Patent
 [NASA-CASE-XII-00252] c11 N70-34844
BEAD, P. G.
 Backpack carrier Patent
 [NASA-CASE-LAB-10056] c05 N71-12351
BEAD, W. S.
 Silent emergency alarm system for schools and
 the like
 [NASA-CASE-MEC-11307-1] c10 N73-30205
 Tool for use in lifting pin supported objects
 [NASA-CASE-WFO-13157-1] c37 N74-32918
BEADER, A. P.
 Method and apparatus for making curved
 reflectors Patent
 [NASA-CASE-XIE-08917] c15 N71-15597
 Apparatus for making curved reflectors Patent
 [NASA-CASE-XIE-08917-2] c15 N71-24836
BEADER, P. D.
 Ion thruster cathode
 [NASA-CASE-XIE-07087] c06 N69-39889
 Electrostatic ion engine having a permanent
 magnetic circuit Patent
 [NASA-CASE-XIE-01124] c28 N71-14043
 Electrostatic ion rocket engine Patent
 [NASA-CASE-XIE-02066] c28 N71-15661
BECHTER, H. L.
 Lightweight refractory insulation and method of
 preparing the same Patent
 [NASA-CASE-IXF-05279] c18 N71-16124
BEEDING, A. B.
 Self-adjusting multisegment, deployable, natural
 circulation radiator Patent
 [NASA-CASE-XBQ-03673] c33 N71-29046
BEEDMON, J. W.
 Air bearing assembly for curved surfaces
 [NASA-CASE-MFS-20423] c15 N72-11388
BECKER, O. Y.
 Low temperature flexure fatigue cryostat Patent
 [NASA-CASE-IXF-02964] c14 N71-17659
 Horizontal cryostat for fatigue testing Patent
 [NASA-CASE-IXF-10968] c14 N71-24234
 Synthesis of superconducting compounds by
 explosive compaction of powders
 [NASA-CASE-MFS-20861-1] c18 N73-32437
BEED, A. E.
 High power-high voltage waterload Patent
 [NASA-CASE-IXF-05381] c09 N71-20842
BEED, J. H., JR.
 Instrument for use in performing a controlled
 Valsalva maneuver Patent
 [NASA-CASE-IMS-01615] c05 N70-41329
BEED, L.
 Method of forming ceramic to metal seal Patent
 [NASA-CASE-IXF-01263-2] c15 N71-26312
BEED, W. H., III
 Test unit free-flight suspension system Patent
 [NASA-CASE-XIA-00939] c11 N71-15926
 Viscous-pendulum-damper Patent
 [NASA-CASE-XIA-02079] c12 N71-16894
 Viscous pendulum damper Patent
 [NASA-CASE-LAB-10274-1] c14 N71-17626
 Suspended mass impact damper Patent
 [NASA-CASE-LAB-10193-1] c15 N71-27146
BEHAGE, J. B.
 Pulse counting circuit which simultaneously
 indicates the occurrence of the nth pulse Patent
 [NASA-CASE-IXF-00906] c09 N70-41655
BEIBER, J. B. C.
 Contour detector and data acquisition system for
 the left ventricular outline
 [NASA-CASE-ABC-10985-1] c52 N77-17701
BEID, H. J. B., JR.
 Dynamic precession damper for spin stabilized
 vehicles Patent
 [NASA-CASE-XIA-01989] c21 N70-34295
 Attitude orientation of spin-stabilized space
 vehicles Patent
 [NASA-CASE-XIA-00281] c21 N70-36943
BEID, H., JR.
 Pulse width inverter Patent
 [NASA-CASE-MFS-10068] c10 N71-25139
 Induction motor control system with voltage
 controlled oscillator circuit
 [NASA-CASE-MFS-21465-1] c10 N73-32145
BEID, M. S.
 Conical scan tracking system employing a large
 antenna
 [NASA-CASE-MEC-14009-1] c32 N77-28357
BEID, R.
 Spacecraft docking and alignment system
 [NASA-CASE-MSC-12559-1] c18 N76-14186
BEID, W. J.
 Digital frequency discriminator Patent
 [NASA-CASE-MFS-14322] c08 N71-18692
BEINHARDT, G.
 Gas purged dry box glove Patent
 [NASA-CASE-XIE-02531] c05 N71-24080
BEINHOLD, H. W.
 Circuit breaker utilizing magnetic latching
 relays Patent

[NASA-CASE-MSC-11277] c09 N71-29008
REINISCH, R. F.
 Ultraviolet and thermally stable polymer compositions
 [NASA-CASE-ARC-10592-1] c27 N74-21156
 Ultraviolet and thermally stable polymer compositions
 [NASA-CASE-ARC-10592-2] c27 N76-32315
REINITZ, R.
 Extended area semiconductor radiation detectors and a novel readout arrangement Patent
 [NASA-CASE-IGS-03230] c14 N71-23401
REINBAUGH, A.
 Method of using photovoltaic cell using poly-N-vinylcarbazole complex Patent
 [NASA-CASE-NFO-10373] c03 N71-18698
 Dicyanoacetylene polymers Patent
 [NASA-CASE-INE-01250] c06 N71-23500
 Heat detection and compositions and devices therefor
 [NASA-CASE-NFO-10764-1] c14 N73-14428
 Preparation of alkali metal dispersions
 [NASA-CASE-INE-08876] c17 N73-28573
 Heat detection and compositions and devices therefor
 [NASA-CASE-NFO-10764-2] c35 N75-25122
 Durable antistatic coating for polymethylmethacrylate
 [NASA-CASE-NFO-13867-1] c27 N77-22257
REINPEL, R. C.
 Optically pumped resonance magnetometer for determining vectoral components in a spatial coordinate system Patent
 [NASA-CASE-IGS-04879] c14 N71-20428
REINPREL, P. S.
 Aircraft control system
 [NASA-CASE-ERC-10439] c02 N73-19004
REINRIE, W.
 Bacteria detection instrument and method
 [NASA-CASE-GSC-11533-1] c14 N73-13435
REINRIE, P. A.
 Automated clinical system for chromosome analysis
 [NASA-CASE-NFO-13913-1] c52 N77-19750
REPPAE, J.
 Rubber composition for use with hydrazine Patent
 Application
 [NASA-CASE-NFO-11433] c18 N71-31140
REPPAS, G. A.
 Rocket propellant injection
 [NASA-CASE-LEW-11071-1] c27 N73-27695
REYNOLDS, J. H.
 Device and method for determining X ray reflection efficiency of optical surfaces
 [NASA-CASE-MPS-20243] c23 N73-13662
REYNOLDS, E. E.
 Hydrogen-fueled engine
 [NASA-CASE-NFO-13763-1] c37 N77-11398
REYNOLDS, W. E.
 Circuit breaker utilizing magnetic latching relays Patent
 [NASA-CASE-MSC-11277] c09 N71-29008
RHO, J. E.
 Automated fluid chemical analyzer Patent
 [NASA-CASE-INE-09451] c06 N71-26754
RHODES, D. E.
 Optical scanner
 [NASA-CASE-LAR-11711-1] c74 N76-23985
RHODES, L. L.
 Latching mechanism Patent
 [NASA-CASE-MSC-15474-1] c15 N71-26162
RHODES, W. D.
 Composite sandwich lattice structure
 [NASA-CASE-LAR-11898-1] c24 N77-15103
 Composite sandwich lattice structure
 [NASA-CASE-LAR-11898-2] c24 N77-26242
RIAZ, H.
 Constant frequency output two stage induction machine systems Patent
 [NASA-CASE-ERC-10065] c09 N71-27364
RIEBAICH, J. J.
 Guidance and maneuver analyzer Patent
 [NASA-CASE-IBP-09572] c14 N71-15621
RICCIARIELLO, S. E.
 Modified polyurethane foams for fuel-fire Patent
 [NASA-CASE-ARC-10098-1] c06 N71-24739
 Intumescent composition, foamed product prepared therewith, and process for making same
 [NASA-CASE-ARC-10304-1] c18 N73-26572
 Flexible fire retardant polyisocyanate modified neoprene foam
 [NASA-CASE-ARC-10180-1] c27 N74-12814
 Intumescent composition, foamed product prepared therewith and process for making same
 [NASA-CASE-ARC-10304-2] c27 N74-27037
 Polymeric foams from cross-linkable poly-N-arylenebenzimidazoles
 [NASA-CASE-ABC-11008-1] c27 N76-28421
 Intumescent coating containing 4,4'-dinitrosulfanilide
 [NASA-CASE-ABC-11042-1] c24 N77-11119
 Intumescent-ablator coatings using endothermic fillers
 [NASA-CASE-ABC-11043-1] c34 N77-14372
RICE, R. F.
 Data compression system
 [NASA-CASE-NFO-11243] c07 N72-20154
 Space communication system for compressed data with a concatenated Reed-Solomon-Viterbi coding channel
 [NASA-CASE-NFO-13545-1] c32 N77-12240
RICE, R. E.
 Cryogenic storage system Patent
 [NASA-CASE-IMS-04390] c31 N70-41871
RICE, R. W.
 Extrusion can
 [NASA-CASE-NFO-10812] c15 N73-13464
RICE, S. H.
 Method of treating the surface of a glass member
 [NASA-CASE-GSC-12110-1] c27 N77-32308
RICE, W. J.
 Indicated mean effective pressure instrument (INEP)
 [NASA-CASE-LEW-12661-1] c35 N77-32461
RICH, R., JR.
 Bacterial contamination monitor
 [NASA-CASE-GSC-10879-1] c14 N72-25413
 Protein sterilization method of firefly luciferase using reduced pressure and molecular sieves
 [NASA-CASE-GSC-10225-1] c06 N73-27086
RICHARD, C. E.
 Low cycle fatigue testing machine
 [NASA-CASE-LAR-10270-1] c32 N72-25877
RICHARD, R. E.
 Angular accelerometer Patent
 [NASA-CASE-IMS-05936] c14 N70-41682
RICHARDS, R. E.
 Method for detecting pollutants
 [NASA-CASE-LAR-11405-1] c45 N76-31714
RICHARDS, W. E.
 Method and apparatus for optical modulating a light signal Patent
 [NASA-CASE-GSC-10216-1] c23 N71-26722
RICHARDSON, R. W.
 Method for measuring cutaneous sensory perception
 [NASA-CASE-MSC-13609-1] c05 N72-25122
RICHLEY, E. A.
 Rocket engine Patent
 [NASA-CASE-ILE-00342] c28 N70-37980
RICHMOND, J. C.
 Ellipsoidal mirror reflectometer including means for averaging the radiation reflected from the sample Patent
 [NASA-CASE-IGS-05291] c23 N71-16341
RICHTEH, C. G.
 Formed metal ribbon wrap Patent
 [NASA-CASE-ILE-00164] c15 N70-36411
RICHTEH, H. L.
 Reversible motion drive system Patent
 [NASA-CASE-NFO-10173] c15 N71-24696
RICHTEH, I. A.
 Dual digital video switcher
 [NASA-CASE-RSC-10782-1] c33 N75-30431
RIBBE, J. H.
 Landing arrangement for aerial vehicles Patent
 [NASA-CASE-XLA-00142] c02 N70-33286
 Jet aircraft configuration Patent
 [NASA-CASE-XLA-00087] c02 N70-33332
 Landing arrangement for aerial vehicle Patent
 [NASA-CASE-XLA-00806] c02 N70-34858
 Landing arrangement for aerospace vehicle Patent
 [NASA-CASE-XLA-00805] c31 N70-38010
 Control system for rocket vehicles Patent
 [NASA-CASE-XLA-01163] c21 N71-15582
RIBBLING, R. W.
 Force-balanced, throttle valve Patent
 [NASA-CASE-NFO-10808] c15 N71-27432

Bipropellant injector [NASA-CASE-XNF-05461]	c28 N72-23809	[NASA-CASE-MFS-23518-2]	c44 N77-31611
RILEY, J. F. Compact solar still Patent [NASA-CASE-XMS-04533]	c15 N71-23086	ROBERTS, V. W. Silent emergency alarm system for schools and the like [NASA-CASE-NFC-11307-1]	c10 N73-30205
RILEY, T. J. Nickel-base alloy Patent [NASA-CASE-XIE-00283]	c17 N70-36616	ROBERTSON, A. J. Aircraft control system [NASA-CASE-FEC-10439]	c02 N73-19004
RINABET, G. A. Tumbler system to provide random motion [NASA-CASE-XGS-02437]	c15 N69-21472	ROBERTSON, J. B. High field CdS detector for infrared radiation [NASA-CASE-LAR-11027-1]	c35 N74-18088
RINDNER, W. Voltage tunable Gunn-type microwave generator Patent [NASA-CASE-XER-07894]	c09 N71-18721	Real time liquid crystal image converter [NASA-CASE-LAR-11206-1]	c74 N74-30118
Transverse piezoresistance and pinch effect electromechanical transducers Patent [NASA-CASE-ERC-10088]	c26 N71-25490	ROBERTSON, W. L. Two-axis controller Patent [NASA-CASE-XFR-04104]	c03 N70-42073
Pressure sensitive transducers Patent [NASA-CASE-ERC-10087]	c14 N71-27334	ROBILLARD, G. Apparatus and method for control of a solid fueled rocket vehicle Patent [NASA-CASE-XNP-00217]	c28 N70-38181
Gunn-type solid state devices [NASA-CASE-XER-07895]	c26 N72-25679	ROBINS, A. W. Supersonic aircraft Patent [NASA-CASE-XLA-04451]	c02 N71-12243
Electricity measurement devices employing liquid crystalline materials [NASA-CASE-ERC-10275]	c26 N72-25680	ROBINSON, G. F. Heat flux sensor assembly [NASA-CASE-XMS-05909-1]	c14 N69-27459
Semiconductor transducer device [NASA-CASE-ERC-10087-2]	c14 N72-31446	ROBINSON, B. Solid state chemical source for ammonia beam laser Patent [NASA-CASE-XGS-01504]	c16 N70-41578
RINNEHART, D. Space suit [NASA-CASE-MSC-12609-1]	c05 N73-32012	ROBINSON, W. J., JR. Microwave power transmission system wherein level of transmitted power is controlled by reflectors from receiver [NASA-CASE-MFS-21470-1]	c44 N74-19870
RINGELMAN, J. F. Regulated power supply Patent [NASA-CASE-XMS-01991]	c09 N71-21449	ROBSON, P. B. Traveling wave solid state amplifier utilizing a semiconductor with negative differential mobility [NASA-CASE-HQN-10069]	c33 N75-27251
RIPPY, R. B. Linear phase demodulator including a phase locked loop with auxiliary feedback loop [NASA-CASE-GSC-12018-1]	c33 N77-14334	ROCHOW, S. E. Hydroxy terminated perfluoro ethers Patent [NASA-CASE-NFO-10768]	c06 N71-27254
RITCHIE, D. G. Scal particles separator, collector and viewer Patent [NASA-CASE-XNF-09770]	c15 N71-20440	Perfluoro polyether acyl fluorides [NASA-CASE-NFO-10765]	c06 N72-20121
Material handling device Patent [NASA-CASE-XNP-09770-3]	c11 N71-27036	Polyurethane resins from hydroxy terminated perfluoro ethers [NASA-CASE-NFO-10768-2]	c06 N72-27144
Screen particle separator [NASA-CASE-XNP-05770-2]	c15 N72-22483	Highly fluorinated polyurethanes [NASA-CASE-NFO-10767-2]	c06 N72-27151
RITCHIE, D. W. Solar battery with interconnecting means for plural cells Patent [NASA-CASE-XNP-06506]	c03 N71-11050	Highly fluorinated polyurethanes [NASA-CASE-NFO-10767-1]	c06 N73-33076
RITCHIE, V. S. Aerodynamic measuring device Patent [NASA-CASE-XLA-00481]	c14 N70-36824	RODNER, W. B. Solar cell mounting Patent [NASA-CASE-XNF-00826]	c03 N71-20895
Check valve assembly for a probe Patent [NASA-CASE-XLA-00128]	c15 N70-37925	ROEDER, E. E. Brazing alloy binder [NASA-CASE-XNF-05868]	c26 N75-27125
RITTER, D. L. Foldable construction block [NASA-CASE-MSC-12233-2]	c32 N73-13921	Brazing alloy composition [NASA-CASE-XNF-06053]	c26 N75-27126
RLOFF, E. L. Dual wavelength scanning Doppler velocimeter [NASA-CASE-ABC-01637-1]	c35 N75-16783	Brazing alloy [NASA-CASE-XNP-03878]	c26 N75-27127
ROACH, J. E. Casting propellant in rocket engine [NASA-CASE-LAR-11995-1]	c28 N77-10213	ROESKE, P. W. Inductive liquid level detection system Patent [NASA-CASE-XIE-01609]	c14 N71-10500
ROBBINS, B. J. Attitude control system for sounding rockets Patent [NASA-CASE-XGS-01654]	c31 N71-24750	ROGALLO, P. B. Aeroflexible structures [NASA-CASE-XLA-06095]	c01 N69-39981
ROBBLEN, D. B. Deploy/release system [NASA-CASE-LAR-11575-1]	c02 N76-16014	Jet aircraft configuration Patent [NASA-CASE-XLA-00087]	c02 N70-33332
ROBERTS, D. B. Apparatus for testing wiring harness by vibration generating means [NASA-CASE-MSC-15158-1]	c14 N72-17325	Control for flexible parawing Patent [NASA-CASE-XLA-06958]	c02 N71-11038
ROBERTS, D. L. Laser apparatus for removing material from rotating objects Patent [NASA-CASE-MFS-11279]	c16 N71-20400	ROGALLO, V. L. Propeller blade loading control Patent [NASA-CASE-XAC-00139]	c02 N70-34856
ROBERTS, E. J. Cryogenic feedthrough [NASA-CASE-LAR-10031]	c15 N72-22484	Null-type vacuum microbalance Patent [NASA-CASE-XAC-00472]	c15 N70-40180
ROBERTS, M. L. Aluminum or copper substrate panel for selective absorption of solar energy and the method of producing said panel [NASA-CASE-MFS-23518-1]	c44 N77-31610	Thermo-protective device for balances Patent [NASA-CASE-XAC-00648]	c14 N70-40400
Stainless steel panel for selective absorption of solar energy and the method of producing said panel		Force transducer Patent [NASA-CASE-XAC-01101]	c14 N70-41957
		ROGERS, P. O. Synthesis of zinc titanate pigment and coatings containing the same [NASA-CASE-MFS-13532]	c18 N72-17532
		ROGERS, J. B. Pneumatic load compensating or controlling system [NASA-CASE-ABC-10907-1]	c37 N75-32465

Smacke generator
[NASA-CASE-ABC-10905-1] c37 N77-13418

ROGOWSKI, E. S.
Method for detecting pollutants
[NASA-CASE-LAR-11405-1] c45 N76-31714
A method for aerosol analysis by thermoluminescence
[NASA-CASE-LAR-12046-1] c45 N77-17609

ROLF, E.
Laser Doppler system for measuring three dimensional vector velocity Patent
[NASA-CASE-NFS-20386] c21 N71-19212

ROLIK, G. E.
Solar cell panels with light transmitting plate
[NASA-CASE-NFC-10747] c03 N72-22042

ROLLIE, R. F.
Demodulator for carrier transducers
[NASA-CASE-NUC-10107-1] c33 N74-17930

ROLLINS, G. N.
System for calibrating pressure transducer
[NASA-CASE-LAR-10910-1] c35 N74-13132

ROLLINS, J. B.
Externally supported internally stabilized flexible duct joint
[NASA-CASE-NFS-19194-1] c37 N76-14460

ROM, P. E.
Gaseous nuclear rocket Patent
[NASA-CASE-XLE-00321] c22 N70-34572
Gas core nuclear reactor Patent
[NASA-CASE-LEW-10250-1] c22 N71-28759

ROMAN, J. A.
Biomedical electrode arrangement Patent
[NASA-CASE-XFR-10856] c05 N71-11189
Method and apparatus for attaching physiological monitoring electrodes Patent
[NASA-CASE-XFR-07658-1] c05 N71-26293
Gas low pressure low flow rate metering system Patent
[NASA-CASE-FRC-10022] c12 N71-26546
Respiration monitor
[NASA-CASE-FRC-10012] c14 N72-17329

ROMANCZYK, K. C.
Fringe counter for interferometers Patent
[NASA-CASE-LAR-10204] c14 N71-27215

ROMMEL, M. A.
Hydrogen leak detection device Patent
[NASA-CASE-NFS-11537] c14 N71-20442

ROMVARY, E., JR.
Intermittent type silica gel adsorption refrigerator Patent
[NASA-CASE-XNP-00920] c15 N71-15906

ROMNEY, B. W.
Evacuation valve
[NASA-CASE-LAR-10061-1] c15 N72-31483

ROOK, C. W.
Redundant RF system for space applications
[NASA-CASE-NFO-13955-1] c32 N77-28358

ROOT, G. L.
Valve seat
[NASA-CASE-NFO-10606] c15 N72-25451

ROSALIS, L. A.
Control valve and co-axial variable injector Patent
[NASA-CASE-XNP-09702] c15 N71-17654
Multiple orifice throttle valve Patent
[NASA-CASE-XNP-09698] c15 N71-18580

ROSEN, B. A.
Varactor high level mixer
[NASA-CASE-XCS-02171] c09 N69-24324
Apparatus for changing the orientation and velocity of a spinning body traversing a path Patent
[NASA-CASE-BQN-00936] c31 N71-29050

ROSEN, L.
Focused image holography with extended sources Patent
[NASA-CASE-FRC-10019] c16 N71-15551
Recording and reconstructing focused image holograms Patent
[NASA-CASE-FRC-10017] c16 N71-15567
Method and means for recording and reconstructing holograms without use of a reference beam Patent
[NASA-CASE-FRC-10020] c16 N71-26154

ROSENBAUM, B. J.
Flow test device
[NASA-CASE-XMS-04917] c14 N69-24257

ROSENBLUM, L.
Split welding chamber Patent
[NASA-CASE-LEW-11531] c15 N71-14932

Analytical test apparatus and method for determining oxide content of alkali metal Patent
[NASA-CASE-XLE-01997] c06 N71-23527

ROSENGBERG, L. G.
Method and apparatus for background signal reduction in opto-acoustic absorption measurement
[NASA-CASE-NFO-13683-1] c35 N77-14411

ROSIN, A. D.
Zero gravity separator Patent
[NASA-CASE-XLE-00586] c15 N71-15968

ROSIN, S.
Wide angle long eye relief eyepiece Patent
[NASA-CASE-XMS-06056-1] c23 N71-24857
Ritchey-Chretien Telescope
[NASA-CASE-GSC-11487-1] c14 N73-30393

ROSINSKI, W. K.
Adjustable force probe
[NASA-CASE-NFS-20760] c14 N72-33377

ROSITANO, S. A.
Visual examination apparatus
[NASA-CASE-ABC-10329-1] c05 N73-26072
Visual examination apparatus
[NASA-CASE-RE-ABC-10329-2] c52 N76-30793

ROSSER, R. W.
Polyimide foam for the thermal insulation and fire protection
[NASA-CASE-ABC-10464-1] c27 N74-12812
Fiber modified polyurethane foam for ballistic protection
[NASA-CASE-ABC-10714-1] c27 N76-15310

ROSSI, B. B.
X-ray reflection collimator adapted to focus X-radiation directly on a detector Patent
[NASA-CASE-XHQ-04106] c14 N76-40240

ROSSOW, V. J.
Apparatus for measuring conductivity and velocity of plasma utilizing a plurality of sensing coils positioned in the plasma Patent
[NASA-CASE-XAC-05695] c25 N71-16073

ROTH, H.
Voltage tunable Gunn-type microwave generator Patent
[NASA-CASE-XER-07894] c09 N71-18721
Gunn-type solid state devices
[NASA-CASE-XER-07895] c26 N72-25679

ROTHMAN, A.
Supporting and protecting device Patent
[NASA-CASE-XHF-00580] c11 N70-35383

ROUDSBUSH, W. E.
Gas turbine combustor Patent
[NASA-CASE-LEW-10286-1] c28 N71-28915

ROUGHTON, W. A.
Method and apparatus for vibration analysis utilizing the Mossbauer effect
[NASA-CASE-XHF-05882] c35 N75-27329

ROUSEY, W. J.
System for generating timing and control signals
[NASA-CASE-NPO-13125-1] c33 N75-19519

ROUTE, D. E.
Multilevel metallization method for fabricating a metal oxide semiconductor device
[NASA-CASE-NFS-23541-1] c33 N77-27308

ROUZER, L. E.
Segmented superconducting magnet for a broadband traveling wave maser Patent
[NASA-CASE-XGS-10518] c16 N71-28554

ROWE, B. E.
Dually mode locked Nd:YAG laser
[NASA-CASE-GSC-11746-1] c36 N75-19654

ROWLAND, C. W.
Apparatus for ejection of an instrument cover
[NASA-CASE-XHF-04132] c15 N69-27502
Laser communication system for controlling several functions at a location remote to the laser
[NASA-CASE-LAR-10311-1] c16 N73-16536

ROWLEY, P. D.
Measurement of plasma temperature and density using radiation absorption
[NASA-CASE-ABC-10598-1] c75 N74-30156

ROY, B. L.
Cosmic dust analyzer
[NASA-CASE-MSC-13802-2] c35 N76-15431

ROY, U.
Synthesis of superconducting compounds by explosive compaction of powders
[NASA-CASE-NFS-20861-1] c18 N73-32437

ROBERT, K. F.
Method of obtaining permanent record of surface
flow phenomena Patent
[NASA-CASE-XIA-01353] c14 N70-41366
Quick release connector Patent
[NASA-CASE-XIA-01141] c15 N71-13789

RUBIN, B.
Process for the preparation of brushite crystals
[NASA-CASE-ERC-10338] c04 N72-33072

RUBIN, D. C.
Electricity measurement devices employing liquid
crystalline materials
[NASA-CASE-ERC-10275] c26 N72-25680

RUDDOCK, K. A.
Optically pumped resonance magnetometer for
determining vectorial components in a spatial
coordinate system Patent
[NASA-CASE-XGS-04879] c14 N71-20428

RUMBLE, L. B.
Determining distance to lightning strokes from a
single station
[NASA-CASE-KSC-10698] c07 N73-20175
Rocket borne instrument to measure electric
fields inside electrified clouds
[NASA-CASE-KSC-10730-1] c14 N73-32318

RUMBLE, C. V.
Adjustable frequency response microphone
[NASA-CASE-LAR-11170-1] c32 N74-12843
Means for accommodating large overstrain in lead
wires
[NASA-CASE-LAR-10168-1] c33 N74-22865

RUMMEL, J. A.
Metabolic analyzer
[NASA-CASE-MFS-21415-1] c52 N74-20728

RUMMLER, D. B.
Automatic force measuring system Patent
[NASA-CASE-XIA-02605] c14 N71-10773
Low mass truss structure
[NASA-CASE-LAR-10546-1] c11 N72-25287

RUPE, J. B.
Hydrogen rich gas generator
[NASA-CASE-NFO-13342-1] c37 N76-16446
System for minimizing internal combustion engine
pollution emission
[NASA-CASE-NFO-13402-1] c37 N76-18457
Hydrogen rich gas generator
[NASA-CASE-NFO-13342-2] c44 N76-29700

RUPNIK, D. B.
Switching circuit Patent
[NASA-CASE-INP-06505] c10 N71-24799

RUPP, C. C.
Attitude control system
[NASA-CASE-MFS-22787-1] c15 N77-10113
Tetherline system for orbiting satellites
[NASA-CASE-MFS-23564-1] c13 N77-11079

RUSSELL, C. B.
Analog to digital converter tester Patent
[NASA-CASE-XIA-06713] c14 N71-28991

RUSSELL, G. B.
Inert gas metallic vapor laser
[NASA-CASE-NFO-13449-1] c36 N75-32441
Double discharge metal vapor laser with metal
halide as a lasant
[NASA-CASE-NFO-13448-2] c36 N77-24469
Isotope separation using metallic vapor lasers
[NASA-CASE-NFO-13550-1] c36 N77-26477

RUSSELL, J. B., III
Event recorder Patent
[NASA-CASE-XIA-01832] c14 N71-21006
Ablation sensor Patent
[NASA-CASE-XIA-01791] c14 N71-22991

RUSSELL, L. D.
High intensity radiant energy pulse source
having means for opening shutter when light
flux has reached a desired level
[NASA-CASE-ABC-10178-1] c09 N72-17152
Thermoelectric radiometer utilizing polymer film
[NASA-CASE-ABC-10138-1] c14 N72-24477

RUSSELL, W. B.
Method and apparatus for making curved
reflectors Patent
[NASA-CASE-XIX-08917] c15 N71-15597
Apparatus for making curved reflectors Patent
[NASA-CASE-XIX-08917-2] c15 N71-24836

RUST, R.
Solenoid construction Patent
[NASA-CASE-INP-01951] c09 N70-41929

RYAN, C. B.
Quadruphase deacclulation
[NASA-CASE-GSC-12137-1] c32 N77-27272

RYAN, P. B.
Solar photoclysis of water
[NASA-CASE-NFO-13675-1] c44 N77-32580

S

SABAROFF, S.
Broadband frequency discriminator Patent
[NASA-CASE-NFO-10096] c07 N71-24583
Systems and methods for determining radio
frequency interference
[NASA-CASE-GSC-12150-1] c32 N77-12447

SABELMAN, E. E.
Pump for delivering heated fluids
[NASA-CASE-NFO-11417] c15 N73-24513
Ferrofluidic solenoid
[NASA-CASE-NFO-11738-1] c09 N73-30185

SABOL, A. P.
Crossed-field MHD plasma generator/ accelerator
Patent
[NASA-CASE-XIA-03374] c25 N71-15562
Self-repeating plasma generator having
communicating annular and linear arc discharge
passages Patent
[NASA-CASE-XIA-03103] c25 N71-21693
Apparatus and method for generating large mass
flow of high temperature air at hypersonic
speeds
[NASA-CASE-LAR-10612-1] c12 N73-28144
Heat exchanger system and method
[NASA-CASE-LAR-10799-2] c34 N76-17317
Solar hydrogen generator
[NASA-CASE-LAR-11361-1] c44 N77-22607

SACKS, B. B.
Magnetically actuated tuning method for Gunn
oscillators
[NASA-CASE-NFO-12106] c09 N73-15235

SADHUKHAN, P.
Process for preparing higher oxides of the
alkali and alkaline earth metals
[NASA-CASE-ABC-10992-1] c25 N77-17178

SAPPHIRE, H. B.
Material suspension within an acoustically
excited resonant chamber
[NASA-CASE-NFO-13263-1] c12 N75-24774
Heat operated cryogenic electrical generator
[NASA-CASE-NFO-13303-1] c20 N75-24637
Doped Josephson tunneling junction for use in a
sensitive IB detector
[NASA-CASE-NFO-13348-1] c33 N75-31332
Magnetometer using superconducting rotating body
[NASA-CASE-NFO-13388-1] c35 N76-16390
Method and apparatus for generating coherent
radiation in the ultra-violet region and above
by use of distributed feedback
[NASA-CASE-NFO-13346-1] c36 N76-29575
Apparatus for photon excited catalysis
[NASA-CASE-NFO-13566-1] c25 N77-32255

SAHINKAYA, Y.
Optimal control system for an electric motor
driven vehicle
[NASA-CASE-NFO-11210] c11 N72-20244

SAINSBURY-CARTER, J. B.
Bonded joint and method
[NASA-CASE-LAR-10900-1] c37 N74-23064

SAINTCLAIR, T. L.
Polyimide adhesives
[NASA-CASE-LAR-11397-1] c27 N75-29263

SARRELLARIS, P. C.
Automatic fluid dispenser
[NASA-CASE-ABC-10820-1] c54 N75-32766

SALISBURY, J. R., JR.
An improved controller arm for a remotely
related slave arm
[NASA-CASE-ABC-11052-1] c54 N77-30751

SALHIES, S.
Radiation direction detector including means for
compensating for photocell aging Patent
[NASA-CASE-XIA-00183] c14 N70-40239
Spacecraft separation system for spinning
vehicles and/or payloads Patent
[NASA-CASE-XIA-02132] c31 N71-10582

SALTER, W. B.
Pseudo-noise test set for communication system
evaluation
[NASA-CASE-MFS-22671-1] c35 N75-21582
Method of and means for testing a tape
record/playback system

[NASA-CASE-MFS-22671-2] c35 N77-17426
SALTZMAN, E. J.
 Traversing probe Patent
 [NASA-CASE-XFR-02007] c12 N71-24692
SALVINSKI, E. J.
 Electrohydrodynamic control valve Patent
 [NASA-CASE-NFO-10416] c12 N71-27332
 Ultrasonically bonded valve assembly
 [NASA-CASE-NFO-13360-1] c37 N75-25185
SANFIELD, E.
 Inflatable tether Patent
 [NASA-CASE-XMS-10993] c15 N71-28936
SANOWSKI, P. B., JR.
 Liquid-gas separator for zero gravity
 environment Patent
 [NASA-CASE-XMS-01492] c05 N70-41297
SANSON, J. A. B.
 Analytical photoionization mass spectrometer
 with an argon gas filter between the light
 source and monochromator Patent
 [NASA-CASE-LAR-1018C-1] c06 N71-13461
SANSON, E.
 Sealed cabinetry Patent
 [NASA-CASE-HSC-12168-1] c09 N71-18600
SAN MIGUEL, A.
 Means and method of measuring viscoelastic
 strain Patent
 [NASA-CASE-XNP-01153] c32 N71-17645
 Miniature stress transducer Patent
 [NASA-CASE-XNP-02983] c14 N71-21091
SANDBERG, V. I.
 Particle beam measurement apparatus using beam
 kinetic energy to change the heat sensitive
 resistance of the detection probe Patent
 [NASA-CASE-XLE-00243] c14 N70-38602
 Apparatus for increasing ion engine beam density
 Patent
 [NASA-CASE-XLE-00519] c28 N70-41576
SANDER, R. C.
 Transient video signal recording with expanded
 playback Patent
 [NASA-CASE-XRC-10003-1] c09 N71-25866
SANDERS, B. W.
 Airflow control system for supersonic inlets
 [NASA-CASE-XFW-11188-1] c02 N74-20646
SANDROCK, G. D.
 High temperature cobalt-base alloy Patent
 [NASA-CASE-XLR-02991] c17 N71-16025
 High temperature ferrimagnetic cobalt-base alloy
 Patent
 [NASA-CASE-XLR-03629] c17 N71-23248
 Cobalt-base alloy
 [NASA-CASE-XFW-10436-1] c17 N73-32415
SANDSTROM, D. B.
 Fabrication of single crystal film semiconductor
 devices
 [NASA-CASE-ERC-10222] c09 N72-22199
SANTAPPA, D.
 Dually mode locked Nd:YAG laser
 [NASA-CASE-GSC-11746-1] c36 N75-19654
SAUER, L. S.
 Hybrid lubrication system and bearing Patent
 [NASA-CASE-XNP-01641] c15 N71-22997
SAUER, R. L.
 Automatic flowrate sampling
 [NASA-CASE-HSC-14640-1] c54 N76-14804
SAUER, T. E.
 Parallel-plate viscometer with double diaphragm
 suspension
 [NASA-CASE-NFO-11387] c14 N73-14429
SAUBERS, D. G.
 Measuring device Patent
 [NASA-CASE-XMS-01546] c14 N70-40233
 Lightweight electrically powered flexible
 thermal laminate
 [NASA-CASE-HSC-12662-1] c24 N75-16635
SAUNDERS, A. B.
 A technique for breaking ice in the path of a ship
 [NASA-CASE-LAR-10815-1] c16 N72-22520
SAUNDERS, M. T.
 Method of producing porous tungsten ionizers for
 ion rocket engines Patent
 [NASA-CASE-XLR-00455] c28 N70-38197
SAUTER, R. J.
 Foot pedal operated fluid type exercising device
 [NASA-CASE-HSC-11561-1] c05 N73-3201
SAVINO, J. E.
 Simulated fuel assembly Patent
 [NASA-CASE-XLE-00724] c14 N70-34669

SAWKO, P. E.
 Polymeric vehicles as carriers for sulfonic acid
 salt of nitrosubstituted aromatic amines
 [NASA-CASE-ABC-10325] c06 N72-25147
 Intumescent paint containing nitrile rubber
 [NASA-CASE-ABC-10196-1] c18 N73-13562
 Transparent fire resistant polymeric structures
 [NASA-CASE-ABC-10813-1] c27 N76-16230
 Intumescent coating containing
 4,4'-dinitrosulfanilide
 [NASA-CASE-ABC-11042-1] c24 N77-11119
 Intumescent-ablator coatings using endothermic
 fillers
 [NASA-CASE-ABC-11043-1] c34 N77-14372
SAWYER, C. D.
 Control for nuclear thermionic power source
 [NASA-CASE-NFO-13114-2] c44 N76-15573
SAWYER, D. E.
 Semiconductor-ferroelectric memory device
 [NASA-CASE-ERC-10307] c08 N72-21198
 Fabrication of single crystal film semiconductor
 devices
 [NASA-CASE-ERC-10222] c09 N72-22199
SAWYER, J. T.
 Leak detector
 [NASA-CASE-MFS-21761-1] c35 N75-15931
SCAPICCHIO, A. J.
 Apparatus and method for separating a
 semiconductor wafer Patent
 [NASA-CASE-ERC-10138] c26 N71-14354
SCHACH, E.
 Apparatus for controlling the temperature of
 balloon-borne equipment
 [NASA-CASE-GSC-11620-1] c34 N74-23039
SCHACHT, W. F.
 Water cooled contactor for anode in carbon arc
 mechanism
 [NASA-CASE-XMS-03700] c15 N69-24266
SCHACHTER, E. E.
 Apparatus for producing three-dimensional
 recordings of fluorescence spectra Patent
 [NASA-CASE-XGS-01231] c14 N70-41676
SCHAEFER, D. E.
 Binary magnetic memory device Patent
 [NASA-CASE-XGS-00174] c08 N70-34743
 Logarithmic converter Patent
 [NASA-CASE-XLA-00471] c08 N70-34778
 Full binary adder Patent
 [NASA-CASE-XGS-00689] c08 N70-34787
 Ripple add and ripple subtract binary counters
 Patent
 [NASA-CASE-XGS-04766] c08 N71-18602
 Computing apparatus Patent
 [NASA-CASE-XGS-04765] c08 N71-18693
 Signal detection and tracking apparatus Patent
 [NASA-CASE-XGS-03502] c10 N71-20852
 Two-dimensional radiant energy array
 and computing devices
 [NASA-CASE-GSC-11839-1] c60 N77-14751
SCHAEFER, G. J.
 Apparatus and method for determining the
 position of a radiant energy source
 [NASA-CASE-GSC-12147-1] c35 N77-20410
SCHAEER, G. E.
 Method of making porous conductive supports for
 electrodes
 [NASA-CASE-GSC-11367-1] c44 N74-19692
SCHAPPERT, G. T.
 Multivibrator circuit with means to prevent
 false triggering from supply voltage
 fluctuations Patent
 [NASA-CASE-ABC-10137-1] c09 N71-28468
SCHAPPERT, J. C.
 Ultra-long monostable multivibrator employing
 bistable semiconductor switch to allow
 charging of timing circuit Patent
 [NASA-CASE-XGS-00381] c09 N70-34819
SCHALLER, M. C.
 Apparatus for vibrational testing of articles
 [NASA-CASE-GSC-11302-1] c14 N73-13416
SCHAPPERT, G. T.
 Method and apparatus for wavelength tuning of
 liquid lasers
 [NASA-CASE-ERC-10187] c16 N69-31343

SCHAUS, R. B.
Thermobulb mount Patent
[NASA-CASE-NFO-10158] c33 N71-16356

SCHIEBE, H.
Metering gun for dispensing precisely measured
charges of fluid
[NASA-CASE-NFS-21163-1] c54 N74-17853

SCHIEBLEY, D. W.
Flexible formulated plastic separators for
alkaline batteries
[NASA-CASE-LEW-12363-1] c44 N76-19552

SCHIL, J. I.
Cryogenic thermal insulation Patent
[NASA-CASE-XMF-05046] c33 N71-28892

SCHER, H. P.
Spacecraft attitude control method and apparatus
[NASA-CASE-HCN-10439] c21 N72-21624

SCHER, S. B.
Hot air balloon deceleration and recovery system
Patent
[NASA-CASE-XIA-06824-2] c02 N71-11037

SCHIFFNER, G.
Power supply for carbon dioxide lasers
[NASA-CASE-CSC-11222-1] c16 N73-32391

SCHILLER, J. G.
Device for the detection of phenol and related
compounds
[NASA-CASE-LEW-12513-1] c25 N77-18238

SCHINDLER, R. A.
Interferometer direction sensor Patent
[NASA-CASE-NFO-11932-1] c14 N71-17655
Interferometer servo system Patent
[NASA-CASE-NFO-10300] c14 N71-17662
Single reflector interference spectrometer and
drive system therefor
[NASA-CASE-NFO-11932-1] c35 N74-23040
Method and apparatus for providing a servodrive
signal in a high speed stepping interferometer
[NASA-CASE-NFO-13569-1] c35 N75-21600
Interferometer mirror tilt correcting system
[NASA-CASE-NFO-13687-1] c35 N76-14433
Method and apparatus for providing a servo drive
signal in a high-speed stepping interferometer
[NASA-CASE-NFO-13569-2] c33 N77-28395

SCHLESINGER, F. W.
Optical alignment system Patent
[NASA-CASE-XNP-02029] c14 N70-41955

SCHLOSS, A. L.
Solid state switch
[NASA-CASE-XNP-0922E] c09 N69-27500

SCHMIDT, R. P.
Caterpillar micro positioner
[NASA-CASE-GSC-10780-1] c14 N72-16283

SCHMIDT, R. W.
Conical valve plug Patent
[NASA-CASE-XLE-00715] c15 N70-34859
Fluid coupling Patent
[NASA-CASE-XLE-00397] c15 N70-36492

SCHMIDT, K. C.
Radiation and particle detector and amplifier
[NASA-CASE-NFO-12128-1] c14 N73-32317

SCHMIDT, L. P.
Photosensitive device to detect bearing
deviation Patent
[NASA-CASE-XNP-00438] c21 N70-35089
Light sensor
[NASA-CASE-NFO-11311] c14 N72-25414
Sun direction detection system
[NASA-CASE-NFO-13722-1] c74 N77-22951

SCHMIDT, R.
Reactance control system Patent
[NASA-CASE-XMF-0159E] c21 N71-15583

SCHMIDT, R. P.
Monopulse system with an electronic scanner
[NASA-CASE-XGS-05582] c07 N69-27460
Electronic scanning of 2-channel monopulse
patterns Patent
[NASA-CASE-GSC-10299-1] c09 N71-24804
Dish antenna having switchable beamwidth
[NASA-CASE-GSC-11760-1] c33 N75-19516
Single frequency, two feed dish antenna having
switchable beamwidth
[NASA-CASE-GSC-11568-1] c32 N76-15329
Variable beamwidth antenna
[NASA-CASE-GSC-11862-1] c32 N76-18295
Switchable beamwidth monopulse method and system
[NASA-CASE-GSC-11924-1] c33 N76-27472

SCHMIDT, W. G.
Ammonium perchlorate composite propellant
containing an organic transitional metal
chelate catalytic additive Patent
[NASA-CASE-LAB-10173-1] c27 N71-14096

SCHMITT, A. L.
Sun angle calculator
[NASA-CASE-MSC-12617-1] c35 N76-29552

SCHMITZ, B. W.
Trajectory-correction propulsion system Patent
[NASA-CASE-XNF-01104] c28 N70-39931

SCHMITZ, P. H.
Acoustically swept rotor
[NASA-CASE-ABC-11106-1] c05 N77-31130

SCHNEIDER, R. T.
Nonequilibrium radiation nuclear reactor
[NASA-CASE-HCN-10841-1] c73 N75-22108
Safety flywheel
[NASA-CASE-HCN-10888-1] c37 N77-22484

SCHNEIDER, W. C.
Auger attachment method for insulation
[NASA-CASE-MSC-12615-1] c37 N76-19437

SCHNITZER, E.
Inflatable honeycomb Patent
[NASA-CASE-XIA-00204] c32 N70-36536
Manned space station Patent
[NASA-CASE-XIA-00258] c31 N70-38676
Method of making inflatable honeycomb Patent
[NASA-CASE-XIA-03492] c15 N71-22713

SCHNOPPER, H. W.
Dual purpose optical instrument capable of
simultaneously acting as spectrometer and
diffractometer
[NASA-CASE-XNP-05231] c14 N73-28491

SCHOEN, A. H.
Honeycomb panels formed of minimal surface
periodic tubule layers
[NASA-CASE-ERC-10364] c18 N72-25540
Honeycomb core structures of minimal surface
tubule sections
[NASA-CASE-ERC-10363] c18 N72-25541
Expandable space frames
[NASA-CASE-ERC-10365-1] c31 N73-32749

SCHOLL, J. A.
Method of forming shapes from planar sheets of
thermosetting materials
[NASA-CASE-NFO-11036] c15 N72-24522

SCHORUM, S. W.
High speed binary to decimal conversion system
Patent
[NASA-CASE-XGS-01230] c08 N71-19544

SCHRAEDER, J. H.
Multiple input radio receiver Patent
[NASA-CASE-XLA-00901] c07 N71-10775
Cooperative Doppler radar system Patent
[NASA-CASE-LAB-10403] c21 N71-11766
Apparatus for aiding a pilot in avoiding a
midair collision between aircraft
[NASA-CASE-LAB-10717-1] c21 N73-30641

SCHREEDER, K. D.
Broadband stable power multiplier Patent
[NASA-CASE-XNP-10854] c10 N71-26331

SCHROCK, C. G.
Detection of microbial infection in blood and
antibiotic determinations
[NASA-CASE-GSC-12045-1] c52 N77-18733
Determination of antimicrobial susceptibilities
of infected urines without isolation
[NASA-CASE-GSC-12046-1] c52 N77-26797

SCHUBERT, P. B.
Iodine generator for reclaimed water purification
[NASA-CASE-MSC-14632-1] c54 N75-25594

SCHUBERT, P. H.
Sprayable low density ablator
[NASA-CASE-NFS-23506-1] c24 N77-15105

SCHULLER, P. F.
Journal bearings
[NASA-CASE-LEW-11076-1] c37 N74-21061
Journal Bearings
[NASA-CASE-LEW-11076-2] c37 N74-32921
Lubricated journal bearing
[NASA-CASE-LEW-11076-3] c37 N75-30562
Fluid journal bearings
[NASA-CASE-LEW-11076-4] c37 N76-15461

SCHUMACHER, L. L.
Wide angle sun sensor
[NASA-CASE-NFO-13327-1] c35 N75-23910

SCHUSTER, D. M.
Antenna beam-shaping apparatus Patent
[NASA-CASE-XNP-00611] c09 N70-35219

Parabolic reflector horn feed with spillover correction Patent
[NASA-CASE-XMF-00540] c09 N70-35382

Insertion loss measuring apparatus having transformer means connected across a pair of bolometers Patent
[NASA-CASE-XMF-01193] c10 N71-16057

SCHUSTER, B. A.
Solid state television camera system Patent
[NASA-CASE-XMF-06092] c07 N71-24612

SCHUTT, J. B.
Alkali-metal silicate protective coating
[NASA-CASE-IGS-04115] c18 N69-39979

Fire resistant coating composition Patent
[NASA-CASE-GSC-10072] c18 N71-14014

Method for etching copper Patent
[NASA-CASE-XGS-06306] c17 N71-16044

Alkali metal silicate protective coating Patent
[NASA-CASE-XGS-04799] c18 N71-24183

Phototropic composition of matter
[NASA-CASE-IGS-03736] c14 N72-22443

Potassium silicate zinc coatings
[NASA-CASE-GSC-10361-1] c18 N72-23581

Remote sensing of vegetation and soil using microwave ellipsometry
[NASA-CASE-GSC-11976-1] c43 N76-23671

Ultraviolet light reflective coating
[NASA-CASE-GSC-11786-1] c24 N76-24363

SCHUTZENHOFF, L. A.
Apparatus for reducing aerodynamic noise in a wind tunnel
[NASA-CASE-MFS-23099-1] c09 N76-23273

SCHWAB, W.
Closed loop spray cooling apparatus
[NASA-CASE-LEW-11981-1] c37 N76-20486

Closed loop spray cooling apparatus
[NASA-CASE-LEW-11981-2] c34 N77-32434

SCHWAB, W. B.
Solid state power mapping instrument Patent
[NASA-CASE-XIE-00301] c14 N70-36808

SCHWABTZ, I. E.
Alating exhaust noises in jet engines
[NASA-CASE-ABC-10712-1] c07 N74-33218

SCHWARZ, F. C.
Saturation current protection apparatus for saturable core transformers Patent
[NASA-CASE-ERC-10075] c09 N71-24800

Unsaturating saturable core transformer Patent
[NASA-CASE-ERC-10125] c09 N71-24893

Saturation current protection apparatus for saturable core transformers
[NASA-CASE-ERC-10075-2] c09 N72-22196

Load-insensitive electrical device
[NASA-CASE-XER-11046] c09 N72-22203

Analog Signal to Discrete Time Interval Converter (ASDTIC)
[NASA-CASE-ERC-10048] c09 N72-25251

Controllable load insensitive power converters
[NASA-CASE-ERC-10268] c09 N72-25252

Load insensitive electrical device
[NASA-CASE-XER-11046-2] c33 N74-22864

SCHWINGHAMMER, R. J.
Angular measurement system Patent
[NASA-CASE-XMF-00447] c14 N70-33179

Space vehicle electrical system Patent
[NASA-CASE-XMF-00517] c03 N70-34157

Electrical discharge apparatus for forming
[NASA-CASE-XMF-00375] c15 N70-34249

Electro-optical alignment control system Patent
[NASA-CASE-XMF-00908] c14 N70-40238

Method and apparatus for precision sizing and joining of large diameter tubes Patent
[NASA-CASE-XMF-05114] c15 N71-17650

Magnetomotive metal working device Patent
[NASA-CASE-XMF-03793] c15 N71-24833

Method and apparatus for precision sizing and joining of large diameter tubes Patent
[NASA-CASE-XMF-05114-3] c15 N71-24865

Method and apparatus for precision sizing and joining of large diameter tubes Patent
[NASA-CASE-XMF-05114-2] c15 N71-26148

SCHWUTKE, G. B.
Production of crystals from molten solutions
[NASA-CASE-WFO-13969-2] c76 N77-30984

SCIACCA, T. P.
Device for measuring electron-beam intensities and for subjecting materials to electron irradiation in an electron microscope
[NASA-CASE-IGS-01725] c14 N69-39982

SCOGGINS, J. B.
Meteorological balloon Patent
[NASA-CASE-IMP-04163] c02 N71-23007

SCOTT, C. B.
Magnifying scratch gage force transducer
[NASA-CASE-LAR-10496-1] c14 N72-22437

SCOTT, C. B.
Inflatable transpiration cooled nozzle
[NASA-CASE-MFS-20619] c28 N72-11708

SCOTT, R. F.
Burrowing apparatus
[NASA-CASE-IMP-07169] c15 N73-32362

SCOTT, R. E.
Solar cell including second surface mirrors Patent
[NASA-CASE-MEC-10109] c03 N71-11049

SCOTT, S. G.
Nonmagnetic thermal motor for a magnetometer
[NASA-CASE-LAR-03786] c09 N69-21313

SCOTT, W. L.
Tactile sensing means for prosthetic limbs
[NASA-CASE-MFS-16570-1] c05 N73-32013

SCOW, J.
Multiple circuit switch apparatus with improved pivot actuator structure Patent
[NASA-CASE-XAC-03777] c10 N71-15909

SCROOP, F. B.
Relief container
[NASA-CASE-XMS-06761] c05 N69-23192

SCUDDER, L. E.
Application of semiconductor diffusants to solar cells by screen printing
[NASA-CASE-LEW-12775-1] c44 N77-24589

SCULLY, P. T.
Collapsible reflector Patent
[NASA-CASE-XMS-03454] c09 N71-20658

SEA, R. G.
Junction range finder
[NASA-CASE-RSC-10108] c14 N73-25461

SEATON, A. F.
Phase multiplying electronic scanning system Patent
[NASA-CASE-WFO-10302] c10 N71-26142

Virtual wall slot circularly polarized planar array antenna
[NASA-CASE-WFO-10301] c07 N72-11148

Conical reflector antenna
[NASA-CASE-WFO-10303] c07 N72-22127

SEATON, S. L.
Electrostatic plasma modulator for space vehicle re-entry communication Patent
[NASA-CASE-XIA-01400] c07 N70-41331

Means for communicating through a layer of ionized gases Patent
[NASA-CASE-XIA-01127] c07 N70-41372

Method for measuring the characteristics of a gas Patent
[NASA-CASE-XIA-03375] c16 N71-24074

Laser calibrator Patent
[NASA-CASE-XIA-03410] c16 N71-25914

SEAY, B. P., JR.
Burst synchronization detection system Patent
[NASA-CASE-XMS-05605-1] c10 N71-19468

SEBACHER, D. I.
Solar hydrogen generator
[NASA-CASE-LAR-11361-1] c44 N77-22607

SECKEL, E.
Integrated lift/drag controller for aircraft
[NASA-CASE-ABC-10456-1] c05 N75-12930

SECRETAN, L.
Rotary bead dropper and selector for testing micrometeorite detectors Patent
[NASA-CASE-IGS-03304] c09 N71-22988

SEEGMILLER, H. L. B.
Inertia diaphragm pressure transducer Patent
[NASA-CASE-XAC-02981] c14 N71-21072

SEIDENBERG, B.
Method and apparatus for determining the contents of contained gas samples
[NASA-CASE-GSC-10903-1] c14 N75-12444

Low outgassing polydimethylsiloxane material and preparation thereof
[NASA-CASE-GSC-11358-1] c06 N75-26100

SEILER, E. B.
Method for leakage testing of tanks Patent
[NASA-CASE-IMP-02392] c32 N71-24285

SEITZ, T. E.
Heat activated cell with alkali anode and alkali salt electrolyte Patent
[NASA-CASE-LEW-11358] c03 N71-26084

- SEITZINGER, V. P.
Unfired-ceramic flame-resistant insulation and method of making the same Patent
[NASA-CASE-XMF-01030] c18 N70-41583
Ceramic insulation for radiant heating environments and method of preparing the same Patent
[NASA-CASE-MFS-14253] c33 N71-24858
- SELCUK, M. K.
A non-tracking solar energy collector system
[NASA-CASE-MFO-13813-1] c44 N77-19579
A non-tracking solar energy collector system
[NASA-CASE-MFO-13817-1] c44 N77-28583
Solar energy collection system
[NASA-CASE-MFO-13810-1] c44 N77-32582
- SELLEN, J. H., JR.
Method and apparatus for measuring potentials in plasmas Patent
[NASA-CASE-XLE-00821] c25 N71-15650
Apparatus for field strength measurement of a space vehicle Patent
[NASA-CASE-XLE-00820] c14 N71-16014
Apparatus for measuring electric field strength on the surface of a model vehicle Patent
[NASA-CASE-XLE-02038] c09 N71-16086
- SERAFINI, I. I.
Preparation of polyimides from mixtures of monomeric diamines and esters of polycarboxylic acids
[NASA-CASE-LEW-11325-1] c06 N73-27980
- SEVARI, P. D.
Miniature hydraulic actuator
[NASA-CASE-LAR-11522-1] c34 N74-34881
- SEWARD, E. B.
Two color horizon sensor
[NASA-CASE-ERC-10174] c14 N72-25409
- SEYFFERT, B. E.
Controlled glass bead peening Patent
[NASA-CASE-XLA-07390] c15 N71-18616
- SEYL, J. W.
Dynamic Doppler simulator Patent
[NASA-CASE-XMS-05454-1] c07 N71-12391
- SHADY, D. L.
Device for tensioning test specimens within an hermetically sealed chamber
[NASA-CASE-MFS-23281-1] c35 N77-22450
- SHAEFER, D. B.
Analog to digital converter for two-dimensional radiant energy array computers
[NASA-CASE-GSC-11839-3] c60 N77-32731
- SHAFFER, J. I.
Solid propellant rocket motor nozzle
[NASA-CASE-MEC-11458] c28 N72-23810
Solid propellant rocket motor
[NASA-CASE-MFO-11559] c28 N73-24784
Preparing oxidizer coated metal fuel particles
[NASA-CASE-MEC-11975-1] c28 N74-33209
- SHAFFER, C. V.
Active EC networks
[NASA-CASE-ARC-10042-2] c10 N72-11256
Multiloop EC active filter apparatus having low parameter sensitivity with low amplifier gain
[NASA-CASE-MEC-10192] c09 N72-21245
- SHAI, C. H.
Alkali-metal silicate protective coating
[NASA-CASE-XGS-04119] c18 N69-39979
Alkali metal silicate protective coating Patent
[NASA-CASE-XGS-04799] c18 N71-24183
- SHALIBS, B. K.
Method and apparatus for sputtering utilizing an apertured electrode and a pulsed substrate bias
[NASA-CASE-LEW-10920-1] c17 N73-24569
- SHANKAR, M. K.
Ultrastable calibrated light source
[NASA-CASE-MSC-12293-1] c14 N72-27411
- SHANNON, R. L.
Plasma cleaning device
[NASA-CASE-MFS-22906-1] c75 N76-24001
- SHAPIRO, H.
Omi-directional anisotropic molecular trap Patent
[NASA-CASE-XGS-00783] c30 N71-17788
Trap for preventing diffusion pump backstreaming
[NASA-CASE-GSC-10518-1] c15 N72-22489
- SHARPE, M. H.
Sprayable low density ablator
[NASA-CASE-MFS-23506-1] c24 N77-15105
Apparatus for automatically spraying a coating material
[NASA-CASE-MFS-23506-2] c37 N77-20441
- Aluminum or copper substrate panel for selective absorption of solar energy and the method of producing said panel
[NASA-CASE-MFS-23518-1] c44 N77-31610
Stainless steel panel for selective absorption of solar energy and the method of producing said panel
[NASA-CASE-MFS-23518-2] c44 N77-31611
- SHATAZSKY, R.
Tape guidance system and apparatus for the provision thereof Patent
[NASA-CASE-MNP-09453] c08 N71-19420
- SHATTUCK, R. B.
Protection of serially connected solar cells against open circuits by the use of shunting diode Patent
[NASA-CASE-XLE-04535] c03 N71-23354
- SHAW, C. S.
Exhaust flow deflector
[NASA-CASE-LAR-11570-1] c34 N76-18364
- SHERTS, R. E.
Detector absorptivity measuring method and apparatus
[NASA-CASE-LAR-10907-1] c35 N76-29551
- SHEPHERD, P. K.
Method and apparatus for distillation of liquids Patent
[NASA-CASE-MNP-08124] c15 N71-27184
Method for distillation of liquids
[NASA-CASE-MNP-08124-2] c06 N73-13129
- SHEIBLEY, D. W.
Inorganic-organic battery separator for alkaline batteries
[NASA-CASE-LEW-12649-1] c44 N76-31674
Formulated plastic separators for soluble electrode cells
[NASA-CASE-LEW-12358-1] c44 N77-18560
Gels as battery separators for soluble electrode cells
[NASA-CASE-LEW-12364-1] c44 N77-22606
- SHELTON, G. B.
System for the measurement of ultra-low stray light levels
[NASA-CASE-MFS-23513-1] c74 N77-14842
Notch filter
[NASA-CASE-MFS-23303-1] c34 N77-18307
- SHELTON, J. P., JR.
Monopulse tracking system Patent
[NASA-CASE-XGS-01155] c10 N71-21483
- SHELTON, R. D.
Electron beam instrument for measuring electric fields Patent
[NASA-CASE-XMF-10289] c14 N71-23699
- SHEPARD, C. E.
Electric arc apparatus Patent
[NASA-CASE-XAC-01677] c09 N71-20816
- SHEPARD, L. F.
Space suit
[NASA-CASE-MSC-12609-1] c05 N73-32012
- SHEPARD, S. K.
Peak polarity selector Patent
[NASA-CASE-FRC-10010] c10 N71-24862
- SHERBURN, A. E.
Capacitive tank gaging apparatus being independent of liquid distribution
[NASA-CASE-MFS-21629] c14 N72-22442
- SHERPRY, J. B.
Bonded elastomeric seal for electrochemical cells Patent
[NASA-CASE-XGS-02631] c03 N71-23006
Frangible electrochemical cell
[NASA-CASE-XGS-10010] c03 N72-15986
Process for making sheets with parallel pores of uniform size
[NASA-CASE-GSC-10984-1] c37 N75-26371
- SHERMAN, A.
Annular slit colloid thruster Patent
[NASA-CASE-GSC-10709-1] c28 N71-25213
- SHERWIN, E. J.
Bonding thermoelectric elements to nonmagnetic refractory metal electrodes
[NASA-CASE-XGS-04554] c15 N69-39786
- SHEETS, S. G.
Non-flammable elastomeric fiber from a fluorinated elastomer and containing an halogenated flame retardant
[NASA-CASE-MSC-14331-1] c27 N76-24405
Flame retardant elastomeric compositions
[NASA-CASE-MSC-14331-2] c27 N76-24408

Flame retardant elastomeric compositions
 [NASA-CASE-MSC-14331-5] c27 N76-24409
 SREWMER, G. A.
 Life preserver Patent
 [NASA-CASE-XMS-00664] c05 N70-36493
 Inflatable radar reflector unit Patent
 [NASA-CASE-XMS-00893] c07 N70-40063
 Rescue litter flotation assembly Patent
 [NASA-CASE-XMS-04170] c05 N71-22748
 SHIEBER, B.
 Prestressed refractory structure Patent
 [NASA-CASE-XNP-02888] c18 N71-21068
 SHIGEMOTO, F. B.
 Laser fluid velocity detector Patent
 [NASA-CASE-IAC-10770-1] c16 N71-24828
 SHILLINGER, G. I., JR.
 Spring operated accelerator and constant force
 spring mechanism therefor
 [NASA-CASE-AEC-10898-1] c35 N77-18417
 SHIM, I. B.
 Recorder/processor apparatus
 [NASA-CASE-GSC-11553-1] c35 N74-15831
 SHIMA, B.
 Multitarget sequential sputtering apparatus
 [NASA-CASE-NFC-13345-1] c37 N75-19684
 SHINADA, K.
 Thermionic diode switch Patent
 [NASA-CASE-NFO-10404] c03 N71-12255
 Cavity emitter for thermionic converter Patent
 [NASA-CASE-NPC-10412] c09 N71-28421
 Thermal to electrical power conversion system
 with solid-state switches with Seebeck effect
 compensation
 [NASA-CASE-NFC-11388] c03 N72-23048
 Electric power generation system directory from
 laser power
 [NASA-CASE-NFO-13308-1] c36 N75-30524
 Thermostatically controlled non-tracking type
 solar energy concentrator
 [NASA-CASE-NFC-13497-1] c44 N76-14602
 SHIMODA, K.
 Method and apparatus for stabilizing a gaseous
 optical laser Patent
 [NASA-CASE-IGS-03644] c16 N71-18614
 SHIRA, C. S.
 Method of heat treating age-hardenable alloys
 [NASA-CASE-XNP-01311] c26 N75-29236
 SHORES, P. W.
 Position determination systems
 [NASA-CASE-MSC-12593-1] c17 N76-21250
 SHORTRIDGE, S. B.
 Switching circuit employing regeneratively
 connected complementary transistors Patent
 [NASA-CASE-XNF-02654] c10 N70-42032
 SHRIVER, C. B.
 Method of making a filament-wound container Patent
 [NASA-CASE-XLE-03803-2] c15 N71-17651
 Filament wound container Patent
 [NASA-CASE-XLE-03803] c15 N71-23816
 Panelized high performance multilayer insulation
 Patent
 [NASA-CASE-MFS-14023] c33 N71-25351
 SHRIVER, C. L.
 Multichannel logarithmic RF level detector
 [NASA-CASE-LAR-11021-1] c32 N76-14321
 SHRIVER, E. L.
 Apparatus for determining the deflection of an
 electron beam impinging on a target Patent
 [NASA-CASE-XNF-06617] c09 N71-24843
 Shock wave convergence apparatus
 [NASA-CASE-MFS-20890] c14 N72-22439
 Self-energized plasma compressor
 [NASA-CASE-MFS-22145-1] c75 N75-13625
 Two stage light gas-plasma projectile accelerator
 [NASA-CASE-MFS-22287-1] c75 N76-14931
 Self-energized plasma compressor
 [NASA-CASE-MFS-22145-2] c75 N76-17951
 Semiconductor projectile impact detector
 [NASA-CASE-MFS-23008-1] c35 N76-19405
 Charge injection method and apparatus of
 producing large area electrets
 [NASA-CASE-MFS-22186-1] c33 N76-23483
 SHUBE, E. B.
 Nose cone mounted heat resistant antenna Patent
 [NASA-CASE-XMS-04312] c07 N71-22984
 SHULMAN, A. B.
 Method and apparatus for eliminating coherent
 noise in a coherent energy imaging system
 without destroying spatial coherence
 [NASA-CASE-GSC-11133-1] c23 N72-11568
 Method and apparatus for producing an image from
 a transparent object
 [NASA-CASE-GSC-11989-1] c74 N77-28932
 SHUMATE, E. S.
 Method and apparatus for aligning a laser beam
 projector Patent
 [NASA-CASE-NFO-11087] c23 N71-29125
 Differential optoacoustic absorption detector
 [NASA-CASE-NFO-13759-1] c35 N77-11363
 SHURE, L. I.
 Protected isotope heat source
 [NASA-CASE-LEW-11227-1] c73 N75-30876
 Direct heating surface combustor
 [NASA-CASE-LEW-11877-1] c44 N76-28646
 SHUTE, D. I.
 Reference apparatus for medical ultrasonic
 transducer
 [NASA-CASE-AEC-10753-1] c54 N75-27760
 SIDMAN, K. R.
 Non-flammable elastomeric fiber from a
 fluorinated elastomer and containing an
 halogenated flame retardant
 [NASA-CASE-MSC-14331-1] c27 N76-24405
 Flame retardant elastomeric compositions
 [NASA-CASE-MSC-14331-2] c27 N76-24408
 Flame retardant elastomeric compositions
 [NASA-CASE-MSC-14331-3] c27 N76-24409
 SIDORAK, L. G.
 Solar cell shingle
 [NASA-CASE-LEW-12587-1] c44 N77-31601
 SIEBERT, C. J.
 Flexible/rigidifiable cable assembly
 [NASA-CASE-MSC-13512-1] c15 N72-22485
 SINGEL, B.
 Resonant infrasonic gauging apparatus
 [NASA-CASE-MSC-11847-1] c14 N72-11363
 SINGMAN, A. E.
 Laser system with an antiresonant optical ring
 [NASA-CASE-BQN-10844-1] c36 N75-19653
 SIREADSKI, L. E.
 Mass spectrometer with magnetic pole pieces
 providing the magnetic fields for both the
 magnetic sector and an ion-type vacuum pump
 [NASA-CASE-NFO-13663-1] c35 N77-14406
 SIWERT, R. D.
 Fine particulate capture device
 [NASA-CASE-LEW-11583-1] c37 N74-13199
 SIGALLA, A.
 Aircraft design concept
 [NASA-CASE-LAR-11852-1] c05 N77-15027
 SIGFRED, J.
 Length controlled stabilized mode-lock Nd:YAG
 laser
 [NASA-CASE-GSC-11571-1] c36 N77-25499
 SIGMORELLI, B. A.
 Reinforced metallic composites Patent
 [NASA-CASE-XLE-02428] c17 N70-33288
 Method of making fiber reinforced metallic
 composites Patent
 [NASA-CASE-XLE-00231] c17 N70-38198
 Method of making fiber composites
 [NASA-CASE-LEW-10424-2-2] c18 N72-25539
 SIKORA, P. P.
 High temperature testing apparatus Patent
 [NASA-CASE-XLE-00335] c14 N70-35368
 SIKORA, D. J.
 Apparatus for overcurrent protection of a
 push-pull amplifier Patent
 [NASA-CASE-MSC-12033-1] c09 N71-13531
 SILVER, R. B.
 Means and method of measuring viscoelastic
 strain Patent
 [NASA-CASE-XNF-01153] c32 N71-17645
 Miniature stress transducer Patent
 [NASA-CASE-XNF-02983] c14 N71-21091
 Apparatus for remote measurement of displacement
 of marks on a specimen undergoing a tensile test
 [NASA-CASE-NFO-10778] c14 N72-11364
 Subminiature insertable force transducer
 [NASA-CASE-NFO-13423-1] c33 N75-31329
 Strain gage mounting assembly
 [NASA-CASE-NPO-13170-1] c35 N76-14430
 Miniature muscle displacement transducer
 [NASA-CASE-NFO-13519-1] c33 N76-19338
 Myocardium wall thickness transducer and
 measuring method
 [NASA-CASE-NFO-13644-1] c52 N76-29895

Catheter tip force transducer for cardiovascular research [NASA-CASE-NFO-13643-1]	c52 N76-29896	[NASA-CASE-XLA-00941]	c14 N71-23240
SILVERMAN, J. E. Programmable telemetry system Patent [NASA-CASE-GSC-10131-1]	c07 N71-24624	SIVLEY, J. E. Phase locked phase modulator including a voltage controlled oscillator Patent [NASA-CASE-IMP-05382]	c10 N71-23544
SILVERTSON, V. E., JR. Logical function generator [NASA-CASE-XIA-05099]	c09 N73-13209	SIZEMORE, E. C. Method and apparatus for battery charge control Patent [NASA-CASE-IGS-05432]	c03 N71-19438
SIMAS, V. E. Optimum predetection diversity receiving system Patent [NASA-CASE-IGS-00740]	c07 N71-23098	SLATER, R. J. Traveling sealer for contoured table Patent [NASA-CASE-XLA-01494]	c15 N71-24164
SIMMONDS, H. E. Self-contained breathing apparatus [NASA-CASE-MSC-14733-1]	c54 N76-24900	SLATTERY, J. C. Method and apparatus for measuring potentials in plasmas Patent [NASA-CASE-XLE-00821]	c25 N71-15650
SIMMONDS, P. G. Atmospheric sampling devices [NASA-CASE-NFO-11373]	c13 N72-25323	SLAYDEN, H. D. Pulse amplitude and width detector Patent [NASA-CASE-IMP-06519]	c09 N71-12519
Electrolytic gas operated actuator [NASA-CASE-NFO-11369]	c15 N73-13467	Pulse rise time and amplitude detector Patent [NASA-CASE-IMP-08804]	c09 N71-24717
Compact hydrogenator [NASA-CASE-NFO-11682-1]	c35 N74-15127	SLERNAN, W. C., JR. Control for flexible parawing Patent [NASA-CASE-XIA-06958]	c02 N71-11038
SIMMONS, G. E. Preparing oxidizer coated metal fuel particles [NASA-CASE-NFO-11975-1]	c28 N74-33209	SLERP, W. S. Particulate and solar radiation stable coating for spacecraft [NASA-CASE-LAR-10805-2]	c34 N77-18382
SIMMONS, W. E. Indexed keyed connection Patent [NASA-CASE-IMS-02532]	c15 N70-41808	SLIPER, L. W., JR. Solar cell and circuit array and process for nullifying magnetic fields Patent [NASA-CASE-IGS-03390]	c03 N71-23187
SIMON, H. E. Data-aided carrier tracking loops [NASA-CASE-NFO-11282]	c10 N73-16205	SLINNEY, H. E. Bonded solid lubricant coating Patent [NASA-CASE-IMS-00259]	c18 N70-36400
Decision feedback loop for tracking a polyphase modulated carrier [NASA-CASE-NFO-13103-1]	c32 N74-20811	Method of making self lubricating fluoride-metal composite materials Patent [NASA-CASE-XLE-08511-2]	c18 N71-16105
Coherent receiver employing nonlinear coherence detection for carrier tracking [NASA-CASE-NFO-11921-1]	c32 N74-30523	Self-lubricating fluoride metal composite materials Patent [NASA-CASE-XLE-08511]	c18 N71-23710
SIMON, S. L. Temperature reducing coating for metals subject to flame exposure Patent [NASA-CASE-XLE-00035]	c33 N71-29151	Bearing material [NASA-CASE-LFW-11930-1]	c24 N76-22309
SIMPkins, L. G. Television multiplexing system [NASA-CASE-MSC-10654-1]	c07 N73-30115	Bearing material [NASA-CASE-LFW-11930-2]	c24 N76-26282
SIMPSON, W. E. Radiator deployment actuator Patent [NASA-CASE-MSC-11817-1]	c15 N71-26611	Bearing material [NASA-CASE-LFW-11930-3]	c24 N77-32249
SIMPSON, W. G. Space environmental work simulator Patent [NASA-CASE-IMP-07488]	c11 N71-18773	SLOWIKOWSKI, D. P. Digital pulse width selection circuit Patent [NASA-CASE-XLA-07788]	c09 N71-29139
Stud-bonding gun [NASA-CASE-MFS-20299]	c15 N72-11392	SMALL, J. G. Means for visually indicating flight paths of vehicles between the Earth, Venus, and Mercury Patent [NASA-CASE-IMP-00708]	c14 N70-35394
Mixing insert for foam dispensing apparatus [NASA-CASE-MFS-20607-1]	c37 N76-19436	SMITH, A. B. Method of forming thin window drifted silicon charged particle detector Patent [NASA-CASE-XLE-00808]	c24 N71-10560
Sprayable low density allator [NASA-CASE-MFS-23506-1]	c24 N77-15105	SMITH, C. Counter and shift register Patent [NASA-CASE-IMP-01753]	c08 N71-22897
Apparatus for automatically spraying a coating material [NASA-CASE-MFS-23506-2]	c37 N77-20441	SMITH, D. Brazing alloy Patent [NASA-CASE-IMP-03063]	c17 N71-23365
SIMS, C. R. Multi axes vibration fixtures [NASA-CASE-MFS-20242]	c14 N73-19421	SMITH, D. L. Hall effect transducer [NASA-CASE-LAR-10620-1]	c09 N72-25255
SINCLAIR, A. E. Ablation sensor Patent [NASA-CASE-XIA-01791]	c14 N71-22991	SMITH, B. W. Barium release system [NASA-CASE-LAR-10670-1]	c06 N73-30097
Laser communication system for controlling several functions at a location remote to the laser [NASA-CASE-LAR-10311-1]	c16 N73-16536	Rocket having barium release system to create ion clouds in the upper atmosphere [NASA-CASE-LAR-10670-2]	c15 N74-27360
Automatic focus control for facsimile cameras [NASA-CASE-LAR-11213-1]	c35 N75-15014	SMITH, B. A. Spherical tank gauge Patent [NASA-CASE-IMS-06236]	c14 N71-21007
SINGH, J. J. Hoschauer spectrometer radiation detector [NASA-CASE-LAR-11155-1]	c35 N74-15091	SMITH, H. E. Digital computing cardiometer [NASA-CASE-MFS-20284-1]	c52 N74-12778
SINOCKY, P. J. Apparatus for transferring cryogenic liquids Patent [NASA-CASE-XLE-00345]	c15 N70-38020	SMITH, H. J. Variable resistance constant tension and lubrication device [NASA-CASE-RSC-10723-1]	c37 N75-13265
SIVERTSON, W. E., JR. Adaptive compression of communication signals Patent [NASA-CASE-XLA-03076]	c07 N71-11266	SMITH, J. A. Thermal insulation protection means [NASA-CASE-MSC-12737-1]	c34 N77-22423
Rate data encoder [NASA-CASE-LAR-10128-1]	c08 N73-20217	SMITH, J. P. Energy management system for glider type vehicle	
Method of locating persons in distress [NASA-CASE-LAR-11390-1]	c32 N77-21267		
SIVITER, J. E., JR. Micrometeoroid penetration measuring device Patent			

Patent [NASA-CASE-XFB-00756]	c02 N71-13421	[NASA-CASE-IXP-06942]	c28 N71-23293
SMITH, J. B., JR. Balanced bellows spirometer [NASA-CASE-XAB-01547]	c05 N69-21473	SOINI, H. B. Apparatus for measuring thermal conductivity Patent [NASA-CASE-IGS-01052]	c14 N71-15992
Temperature compensated solid state differential amplifier Patent [NASA-CASE-XAC-00435]	c09 N70-35440	SOKOLOWSKI, D. E. Heat exchanger [NASA-CASE-LEW-12252-1]	c34 N75-19579
Transfer valve Patent [NASA-CASE-XAC-01158]	c15 N71-23051	SOLOMON, G. Error correcting method and apparatus Patent [NASA-CASE-IXP-02748]	c08 N71-22749
Method and apparatus for continuously monitoring blood oxygenation, blood pressure, pulse rate and the pressure pulse curve utilizing an ear oximeter as transducer Patent [NASA-CASE-XAC-05422]	c04 N71-23185	SOLTIS, D. G. Method of making membranes [NASA-CASE-IXP-04264]	c03 N69-21337
SMITH, L. Low gravity phase separator [NASA-CASE-HSC-14773-1]	c31 N75-32262	Flexible formulated plastic separators for alkaline batteries [NASA-CASE-LEW-12363-1]	c44 N76-19552
SMITH, L. G. Ionospheric battery Patent [NASA-CASE-IGS-01593]	c03 N70-35408	SOMANO, R. B. Durable antistatic coating for polymethylmethacrylate [NASA-CASE-NFO-13867-1]	c27 N77-22257
SMITH, L. B., JR. Reverse pitch fan with divided splitter [NASA-CASE-LEW-12760-1]	c07 N77-17059	SOMMENSCHNEID, C. H. Clear air turbulence detector [NASA-CASE-HFS-21244-1]	c36 N75-15028
SMITH, L. S. Polarity sensitive circuit Patent [NASA-CASE-IXP-00952]	c10 N71-23271	Focused laser Doppler velocimeter [NASA-CASE-HFS-23178-1]	c35 N77-10493
SMITH, M. Silica reusable surface insulation [NASA-CASE-ARC-10721-1]	c27 N76-22376	SOMMENSCHNEID, G. Method for attaching a fused-quartz mirror to a conductive metal substrate [NASA-CASE-HFS-23405-1]	c26 N77-29260
SMITH, R. W. Compact solar still Patent [NASA-CASE-XMS-04533]	c15 N71-23086	SORENSEN, C. E. Electric arc device for heating gases Patent [NASA-CASE-XAC-00319]	c25 N70-41628
SMITH, T. B., III Display research collision warning system [NASA-CASE-EGN-10703]	c21 N73-13643	SORENSEN, M. E. Wind tunnel flow generation section [NASA-CASE-ARC-10710-1]	c09 N75-12969
SMITH, W. O. Star tracking reticles and process for the production thereof [NASA-CASE-GSC-11188-2]	c21 N73-19630	The engine air intake system [NASA-CASE-ARC-10761-1]	c07 N77-18154
Star tracking reticles [NASA-CASE-GSC-11188-1]	c14 N73-32320	SOTER, E. J. Modification of one man life raft [NASA-CASE-IAB-10241-1]	c54 N74-14845
Formation of star tracking reticles [NASA-CASE-GSC-11188-3]	c74 N74-20008	SOTHERLUND, A. W., JR. Single action separation mechanism Patent [NASA-CASE-XIA-00188]	c15 N71-22874
SMITH, W. R. Production of high purity I-123 [NASA-CASE-LEW-10518-1]	c24 N72-33681	SOURS, W. P. Minimech self-deploying boom mechanism [NASA-CASE-GSC-10566-1]	c15 N72-18477
SMITH, W. W. Trajectory-correction propulsion system Patent [NASA-CASE-IXP-01104]	c28 N70-39931	SOWA, W. W. Inflatable transpiration cooled nozzle [NASA-CASE-HFS-20619]	c28 N72-11708
SHOOT, G. F. Low gravity phase separator [NASA-CASE-HSC-14773-1]	c31 N75-32262	SPADY, A. A., JR. Backpack carrier Patent [NASA-CASE-IAB-10056]	c05 N71-12351
SHYLIE, R. E. Liquid-gas separator for zero gravity environment Patent [NASA-CASE-XMS-01492]	c05 N70-41297	Reduced gravity simulator Patent [NASA-CASE-XIA-01787]	c11 N71-16028
SHYLY, R. H. Differential pressure control [NASA-CASE-HFS-14216]	c14 N73-13418	SPAIN, I. L. Hall effect magnetometer [NASA-CASE-LEW-11632-2]	c35 N75-13213
SNEEDEN, R. J. Gas turbine combustion apparatus Patent [NASA-CASE-XLP-103477-1]	c28 N71-20330	SPALVINS, T. Deposition of alloy films [NASA-CASE-LEW-11262-1]	c27 N74-13270
SNODDY, L. G. Insert facing tool [NASA-CASE-HFS-21485-1]	c37 N74-25968	SPARKS, R. B. Fifth wheel [NASA-CASE-FRC-10081-1]	c37 N77-14477
SNYDER, J. A. Injector for use in high voltage isolators for liquid feed lines [NASA-CASE-NFO-11377]	c15 N73-27406	SPERMAN, M. L. Translating horizontal tail Patent [NASA-CASE-XIA-08801-1]	c02 N71-11043
SNYDER, L. H. Particle detection apparatus including a ballistic pendulum Patent [NASA-CASE-XMS-04201]	c14 N71-22990	SPEISER, R. C. Focussing system for an ion source having apertured electrodes Patent [NASA-CASE-IXP-03332]	c09 N71-10618
SNYDER, R. S. Method of crystallization [NASA-CASE-HFS-23001-1]	c76 N77-32919	SPENCER, R., JR. Variable geometry manned orbital vehicle Patent [NASA-CASE-XIA-03691]	c31 N71-15674
SODD, V. J. Production of high purity I-123 [NASA-CASE-LEW-10518-1]	c24 N72-33681	Variable dihedral shuttle orbiter [NASA-CASE-IAB-10706-2]	c05 N77-31132
SOPPEH, G. A. Automated fluid chemical analyzer Patent [NASA-CASE-IXP-09451]	c06 N71-26754	SPENCER, D. J. Data compression system with a minimum time delay unit Patent [NASA-CASE-IXP-08832]	c08 N71-12506
SOBL, G. Focussing system for an ion source having apertured electrodes Patent [NASA-CASE-IXP-03332]	c09 N71-10618	SPENCER, J. L. Electronic strain-level counter [NASA-CASE-IAB-10756-1]	c32 N73-26910
Ion engine casing construction and method of making same Patent		SPENCER, P. B. Radiation direction detector including means for compensating for photocell aging Patent [NASA-CASE-XIA-00183]	c14 N70-40239
		SPENCER, R. L. Thickness measuring and injection device Patent	

[NASA-CASE-MFS-20261] c14 N71-27005
 Ultrasonic scanner for radial and flat panels
 [NASA-CASE-MFS-20335-1] c35 N74-10415

SPENCER, R. S.
 Method of treating the surface of a glass member
 [NASA-CASE-GSC-12110-1] c27 N77-32308

SPIER, R. A.
 Portable milling tool Patent
 [NASA-CASE-IMP-03511] c15 N71-22799
 Restraint system for ergometer
 [NASA-CASE-MFS-21046-1] c14 N73-27377
 Tilting table for ergometer and for other
 bicredical devices
 [NASA-CASE-MFS-21010-1] c05 N73-30078
 Vee-notching device
 [NASA-CASE-MFS-20730-1] c39 N74-13131

SPIES, R.
 Observation window for a gas confining chamber
 [NASA-CASE-MFO-1089C] c11 N73-12265

SPIKER, I. K.
 Thermal insulation protection means
 [NASA-CASE-MSC-12737-1] c34 N77-22423

SPITZ, L. A.
 Process for the preparation of calcium superoxide
 [NASA-CASE-ARC-11053-1] c25 N77-29252

SPITZER, C. E.
 Evaporant holder
 [NASA-CASE-XIA-03105] c15 N69-27483
 Exposure interlock for oscilloscope cameras
 [NASA-CASE-LAR-10319-1] c14 N73-32322

SPITZIG, W. A.
 Method of making a diffusion bonded refractory
 coating Patent
 [NASA-CASE-ILE-01604-2] c15 N71-15610

SPRECKLE, R. E.
 Method of forming a wick for a heat pipe
 [NASA-CASE-MFO-13391-1] c34 N76-27515

SPRINGER, L. E.
 Digital data reformatter/deserializer
 [NASA-CASE-MFO-13676-1] c60 N77-24781

SPRINGETT, J. C.
 Phase-shift data transmission system having a
 pseudo-ncise SYNC code modulated with the data
 in a single channel Patent
 [NASA-CASE-XNF-00911] c08 N70-41961
 Audio system with means for reducing
 noise effects
 [NASA-CASE-MFO-11631] c10 N73-12244

SPRINGFIELD, C. L.
 Flammability test chamber Patent
 [NASA-CASE-KSC-10126] c11 N71-24985
 Autoginition test cell Patent
 [NASA-CASE-KSC-10198] c11 N71-28629

SPROSS, F. R.
 Biological isolation garment Patent
 [NASA-CASE-MSC-12206-1] c05 N71-17599

SQUILLARI, W.
 System for stabilizing torque between a balloon
 and gondola
 [NASA-CASE-GSC-11077-1] c02 N73-13008

SQUIRES, R. P.
 Uniform variable light source
 [NASA-CASE-MFO-11429-1] c74 N77-21941

ST. JOHN, R. R.
 A walking boot assembly
 [NASA-CASE-ARC-11101-1] c54 N77-14742

STABLEY, S. D.
 Quick attach and release fluid coupling assembly
 Patent
 [NASA-CASE-IRS-01985] c15 N71-10782

STAINBACK, J. D.
 Exposure interlock for oscilloscope cameras
 [NASA-CASE-LAR-10319-1] c14 N73-32322

STALLY, E. W.
 Pulse amplitude and width detector Patent
 [NASA-CASE-IMP-06519] c09 N71-12519
 Pulse rise time and amplitude detector Patent
 [NASA-CASE-IMP-08804] c09 N71-24717

STALEY, R. W.
 Exposure system for animals Patent
 [NASA-CASE-XAC-05333] c11 N71-22875

STALLCOB, J. E.
 Measurement of plasma temperature and density
 using radiation absorption
 [NASA-CASE-ARC-10598-1] c75 N74-30156

STALOFF, C.
 Frequency shift keyed demodulator Patent
 [NASA-CASE-IGS-02889] c07 N71-11282

STANES, J. C.
 Television noise reduction device

[NASA-CASE-MSC-12607-1] c32 N75-21485

STANGE, W. C.
 Actuator mechanism
 [NASA-CASE-GSC-11883-2] c37 N77-15400
 Cyclical bi-directional rotary actuator
 [NASA-CASE-GSC-11883-1] c37 N77-19458

STARK, K. W.
 Endless tape cartridge Patent
 [NASA-CASE-IGS-00769] c14 N70-41647
 Endless tape transport mechanism Patent
 [NASA-CASE-IGS-01223] c07 N71-10609
 Annular slit colloid thruster Patent
 [NASA-CASE-GSC-10709-1] c28 N71-25213
 Micro-pound extended range thrust stand Patent
 [NASA-CASE-GSC-10710-1] c28 N71-27094

STARK, H. W.
 Solid propellant liner Patent
 [NASA-CASE-XNP-09744] c27 N71-16392

STARKEY, D. J.
 Torsional disconnect unit
 [NASA-CASE-MFO-10704] c15 N72-20445

STARREB, E. E.
 Frequency measurement by coincidence detection
 with standard frequency
 [NASA-CASE-MSC-14649-1] c33 N76-16331

STCLAIR, T. L.
 Polyimide adhesives
 [NASA-CASE-LAR-12181-1] c27 N77-15192

STECURA, S.
 Thermal barrier coating system
 [NASA-CASE-LER-12554-1] c24 N76-23359

STEELE, R. E.
 Satellite aided vehicle avoidance system Patent
 [NASA-CASE-ERC-10090] c21 N71-24948
 Improved satellite aided vehicle avoidance system
 [NASA-CASE-ERC-10419] c21 N72-21631
 Satellite aided vehicle avoidance system
 [NASA-CASE-ERC-10419-1] c03 N75-30132

STEELE, R. K.
 Method and apparatus for nondestructive testing
 of pressure vessels
 [NASA-CASE-MFO-12142-1] c38 N76-28563

STERNHAGEN, G.
 Expandable support means
 [NASA-CASE-MFO-11059] c15 N72-17454

STEENKEN, J.
 Relief valve
 [NASA-CASE-IMS-05894-1] c15 N69-21924

STEPURAK, E. L.
 Telemetry processor
 [NASA-CASE-GSC-11388-1] c07 N73-24187

STEIN, E. J.
 Continuous detonation reaction engine Patent
 [NASA-CASE-IMP-06926] c28 N71-22983

STEIN, S.
 Injector-valve device Patent
 [NASA-CASE-XII-00303] c15 N70-36535
 Rocket engine injector Patent
 [NASA-CASE-XII-00111] c28 N70-38199
 Rocket engine injector Patent
 [NASA-CASE-XII-03157] c28 N71-24736

STEINBERG, R.
 Solid state power mapping instrument Patent
 [NASA-CASE-XLE-00301] c14 N70-36408
 Molecular beam velocity selector Patent
 [NASA-CASE-XLE-01533] c11 N71-10777
 Method of forming metal hydride films
 [NASA-CASE-LIR-12083-1] c26 N76-18262

STEINMETZ, C. P.
 Energy limiter for hydraulic actuators Patent
 [NASA-CASE-ARC-10131-1] c15 N71-27754

STELLEN, J. J.
 Recorder/processor apparatus
 [NASA-CASE-GSC-11553-1] c35 N74-15831

STELL, R. E.
 In situ transfer standard for ultrahigh vacuum
 gage calibration
 [NASA-CASE-LAR-10862-1] c35 N74-15092

STELLA, A. J.
 Electrical connector pin with wiping action
 [NASA-CASE-IMP-04238] c09 N75-39734

STELZBEND, C. T.
 Reflectometer for receiver input impedance match
 measurement Patent
 [NASA-CASE-IMP-10843] c07 N71-11267
 Multi-feed cone Cassegrain antenna Patent
 [NASA-CASE-MEC-10539] c07 N71-11285
 Matched thermistors for microwave power meters
 Patent

[NASA-CASE-NPO-10348] c10 N71-12554
Broadband microwave waveguide window Patent
[NASA-CASE-XNF-C8880] c09 N71-24808
Rotary vane attenuator wherein rotor has
orthogonally disposed resistive and dielectric
cards
[NASA-CASE-NEC-1141E-1] c14 N73-13420

STENGEL, R. P.
Wind velocity probing device and method Patent
[NASA-CASE-XLA-02C81] c20 N71-16281

STENLUND, S. J.
Rotating mandrel for assembly of inflatable
devices Patent
[NASA-CASE-XIA-04143] c15 N71-17687
Traveling sealer for ccntoured table Patent
[NASA-CASE-XIA-01494] c15 N71-24164

STEPHENS, D. G.
Flexible ring slosh damping baffle Patent
[NASA-CASE-LAR-10317-1] c32 N71-16103
Instrument for measuring the dynamic
behavior of
liquids Patent
[NASA-CASE-XIA-05541] c12 N71-26387
Active vibration isolator for flexible bodies
Patent
[NASA-CASE-LAR-10106-1] c15 N71-27169
Active air cushion control system minimizing
vertical cushion response
[NASA-CASE-LAR-10531-1] c02 N73-13023

STEPHENS, D. L.
Automatic closed circuit television arc guidance
control Patent
[NASA-CASE-NFS-13C46] c07 N71-19433

STEPHENS, J. E.
Microbalance including crystal oscillators for
measuring contaminants in a gas system Patent
[NASA-CASE-NFO-10144] c14 N71-17701
Space simulator Patent
[NASA-CASE-NPO-10141] c11 N71-24964
Low cost solar energy collection system
[NASA-CASE-NFO-13579-1] c44 N75-28519
Sampler of gas borne particles
[NASA-CASE-NFO-13396-1] c35 N76-18401
Wind sensor
[NASA-CASE-NFO-13462-1] c35 N76-24524
Cryostat system for temperatures on the order of
2 deg K or less
[NASA-CASE-NFO-13459-1] c31 N77-10229
Solar energy collection system
[NASA-CASE-NFO-13579-2] c44 N77-20565
Low cost solar energy collection system
[NASA-CASE-NFO-13579-3] c44 N77-20566
Internal combustion engine with electrostatic
discharging fuels
[NASA-CASE-NFO-13798-1] c37 N77-25535
Solar pond
[NASA-CASE-NFO-13581-2] c44 N77-28584

STEPHENS, J. E.
Reduced chromium stainless steel alloys
[NASA-CASE-LEW-12542-1] c26 N77-21217
High toughness-high strength iron alloy
[NASA-CASE-LEW-12542-1] c26 N77-24254

STERN, W.
Reversible current control apparatus Patent
[NASA-CASE-XIA-09371] c10 N71-18724

STERNBERG, J. E.
Laser grating interferometer Patent
[NASA-CASE-XLA-04295] c16 N71-24170

STETSON, A. E.
Silicide coatings for refractory metals Patent
[NASA-CASE-XLE-10910] c18 N71-29040

STEUDEL, E. E.
Controlled caging and uncaging mechanism
[NASA-CASE-GSC-11063-1] c37 N77-27400

STEVENS, L. F.
Aircraft control system
[NASA-CASE-ERC-10439] c02 N73-19004

STEWART, C. E.
Family of frequency to amplitude converters
[NASA-CASE-MSC-12395] c09 N72-25257
Apparatus for statistical time-series analysis
of electrical signals
[NASA-CASE-MSC-12428-1] c10 N73-25240

STEWART, E. E.
Apparatus and method for generating large mass
flow of high temperature air at hypersonic
speeds
[NASA-CASE-LAR-10612-1] c12 N73-28144

STEWART, W. L.
Multistage multiple-reentry turbine Patent
[NASA-CASE-XLE-00170] c15 N76-36412
Multistage multiple-reentry turbine Patent
[NASA-CASE-XLE-00085] c28 N70-39895

STICKLE, J. W.
Direct lift control system Patent
[NASA-CASE-LAR-10249-1] c02 N71-26110

STIFFLER, J. J.
Error correcting method and apparatus Patent
[NASA-CASE-NXP-02748] c08 N71-22749
Encoder/decoder system for a rapidly
synchronizable binary code Patent
[NASA-CASE-NFO-10342] c10 N71-33407

STIGBERG, J. D.
Optical rotational sensor
[NASA-CASE-KSC-10752-1] c15 N73-27407
Signal conditioner test set
[NASA-CASE-KSC-10750-1] c35 N75-12270

STINE, R. A.
Electric arc apparatus Patent
[NASA-CASE-XAC-01677] c09 N71-20816

STIRN, R. J.
High voltage, high current Schottky barrier
solar cell
[NASA-CASE-NPO-13482-1] c44 N74-30448

STOCKARD, R. E.
Semiconductor p-n junction stress and strain
sensor
[NASA-CASE-XIA-04980] c09 N69-27422
Method of making semiconductor p-n junction
stress and strain sensor
[NASA-CASE-XIA-04980-2] c14 N72-28438

STOCKER, P. J.
Laser extensometer
[NASA-CASE-NFS-19259-1] c36 N77-10516

STOKES, C. S.
Barium release system
[NASA-CASE-LAR-10670-1] c06 N73-30097
Rocket having barium release system to create
ion clouds in the upper atmosphere
[NASA-CASE-LAR-10670-2] c15 N74-27360

STOLLER, P. W.
Reversible motion drive system Patent
[NASA-CASE-NFO-10173] c15 N71-24696

STONE, P. A.
Synchronous servo loop control system Patent
[NASA-CASE-NXP-03744] c10 N71-20448

STONE, L. P.
Articulated multiple couch assembly Patent
[NASA-CASE-MSC-11253] c05 N71-12343

STONE, S. E.
Fluid sample collector Patent
[NASA-CASE-XMS-06767-1] c14 N71-20435

STORY, A. W.
System for indicating direction of intruder
aircraft
[NASA-CASE-ERC-10226-1] c14 N73-16483
Display system
[NASA-CASE-ERC-10350] c14 N73-20474

STRAIGHT, D. E.
Rocket motor system Patent
[NASA-CASE-XLE-00323] c28 N70-38505
Gas turbine exhaust nozzle
[NASA-CASE-LEW-11569-1] c07 N74-15453

STRAND, L. D.
Solid propellant rocket motor
[NASA-CASE-NFO-11559] c28 N73-24784
Nitramine propellants
[NASA-CASE-NFO-14103-1] c28 N77-25346

STRANGE, R. G.
Position sensing device employing misaligned
magnetic field generating and detecting
apparatus Patent
[NASA-CASE-XGS-07514] c23 N71-16099
Self-regulating proportionally controlled
heating apparatus and technique
[NASA-CASE-GSC-11752-1] c77 N75-20140

STRASS, R. K.
Motion picture camera for optical pyrometry Patent
[NASA-CASE-XLA-00062] c14 N70-33254
Light intensity modulator controller Patent
[NASA-CASE-XMS-04300] c09 N71-19479

STRIBED, R. R.
Solar cell Patent
[NASA-CASE-ERC-10050] c03 N71-33409

STRINGHAM, R. S.
Process for producing flame resistant polyamides
and products produced thereby
[NASA-CASE-MSC-16074-1] c27 N77-14262

STROM, T. H.
Spiral groove seal
[NASA-CASE-XLE-10326-2] c15 N72-29488
Spiral groove seal
[NASA-CASE-XLE-10326-4] c37 N74-15125

STRONG, I. J.
Stirring apparatus for plural test tubes Patent
[NASA-CASE-XAC-06956] c15 N71-21177

STRONG, J. P., III
Two-dimensional radiant energy array computers
and computing devices
[NASA-CASE-GSC-11839-2] c60 N76-18803
Two-dimensional radiant energy array computers
and computing devices
[NASA-CASE-GSC-11839-1] c60 N77-14751
Analog to digital converter for two-dimensional
radiant energy array computers
[NASA-CASE-GSC-11839-3] c60 N77-32731

STROUB, R. H.
Constant lift rotor for a heavier than air craft
[NASA-CASE-ARC-11045-1] c05 N77-28111

STROUBAL, G.
Thermal insulation protection means
[NASA-CASE-MSC-12737-1] c34 N77-22423

STROUF, E. R.
Electrochemical coulometer and method of forming
same Patent
[NASA-CASE-XGS-05434] c03 N71-20491

STRULL, G.
Solid state television camera system Patent
[NASA-CASE-XMF-06092] c67 N71-24612

STROZIK, E. A.
Ceramic filter insulating material and methods of
producing same
[NASA-CASE-MSC-14795-1] c27 N76-15314

STUART, J. L.
Automated fluid chemical analyzer Patent
[NASA-CASE-XNP-09451] c06 N71-26754

STUART, J. W.
Fire resistant coating composition Patent
[NASA-CASE-GSC-10072] c18 N71-14014
Diffuse reflective coating
[NASA-CASE-GSC-11214-1] c06 N73-13128

STUCKEY, J. H.
Panelized high performance multilayer insulation
Patent
[NASA-CASE-MFS-14023] c33 N71-25351
Cryogenic thermal insulation Patent
[NASA-CASE-XMF-05046] c33 N71-28892

STUDENICK, D. K.
System for stabilizing torque between a balloon
and gondola
[NASA-CASE-GSC-11077-1] c02 N73-13008
Fluid sampling device
[NASA-CASE-GSC-12143-1] c35 N77-32456

STUDER, P. A.
Electronic beam switching commutator Patent
[NASA-CASE-XGS-01451] c09 N71-10677
Direct current motor with stationary armature
and field Patent
[NASA-CASE-XGS-05290] c09 N71-25999
Helical recorder arrangement for multiple
channel recording on both sides of the tape
[NASA-CASE-GSC-10614-1] c09 N72-11224
Electric motive machine including magnetic bearing
[NASA-CASE-XGS-07805] c15 N72-33476
Magnetic bearing
[NASA-CASE-GSC-11079-1] c37 N75-18574
Mechanical capacitor
[NASA-CASE-GSC-12030-1] c44 N76-30652
Magnetic bearing system
[NASA-CASE-GSC-11978-1] c37 N77-17464
Three phase full wave dc motor decoder
[NASA-CASE-GSC-11824-1] c33 N77-26386

STUMPF, E. C., JR.
Hydroxy terminated perfluoro ethers Patent
[NASA-CASE-MFO-10768] c06 N71-27254
Perfluoro polyether acyl fluorides
[NASA-CASE-MFO-10765] c06 N72-20121
Polyurethane resins from hydroxy terminated
perfluoro ethers
[NASA-CASE-MFO-10768-2] c06 N72-27144
Highly fluorinated polyurethanes
[NASA-CASE-MFO-10767-2] c06 N72-27151
Highly fluorinated polyurethanes
[NASA-CASE-MFO-10767-1] c06 N73-33076

STURGIS, A. C.
Multiparameter vision testing apparatus
[NASA-CASE-MSC-13601-2] c54 N75-27759

STURN, R. G.
Self-recording portable soil penetrometer
[NASA-CASE-MFS-20774] c14 N73-19420

STURMAN, J. C.
Pulsed differential comparator circuit Patent
[NASA-CASE-XLE-03804] c10 N71-19471

STYLES, C. H.
Spherical solid-propellant rocket motor Patent
[NASA-CASE-XIA-00105] c28 N70-33331

SUDEY, J.
Low speed phaselock speed control system
[NASA-CASE-GSC-11127-1] c09 N75-24758

SULLIVAN, D. E.
Electrical insulating layer process
[NASA-CASE-IFW-10489-1] c15 N72-25447

SULLIVAN, E. H.
Ablation article and method
[NASA-CASE-IAR-10439-1] c33 N73-27796

SULLIVAN, J. I.
Self-contained breathing apparatus
[NASA-CASE-MSC-14733-1] c54 N76-24900

SULLIVAN, T. E.
Waveguide mixer
[NASA-CASE-ERC-10179] c07 N72-20141

SUNIDA, J. T.
Miniature multichannel biotelemetry system
[NASA-CASE-MFO-13065-1] c52 N74-26625

SUNMERFIELD, D. G.
Wind tunnel model and method
[NASA-CASE-LAR-10812-1] c09 N74-17955

SUNNERS, R. H.
Geneva mechanism
[NASA-CASE-MFO-13281-1] c37 N75-13266

SUTLIFF, J. D.
Wing deployment method and apparatus Patent
[NASA-CASE-XMS-00907] c02 N70-41630

SWAIN, R. L.
Spherical solid-propellant rocket motor Patent
[NASA-CASE-XIA-00105] c28 N70-33331

SWANN, R. T.
Sandwich panel construction Patent
[NASA-CASE-XIA-00349] c33 N70-37979
Dielectric molding apparatus Patent
[NASA-CASE-LAR-10121-1] c15 N71-26721

SWEAT, J. C.
Emergency escape system Patent
[NASA-CASE-XMS-07814] c15 N71-27067

SWEET, G. E.
Compensating radiometer
[NASA-CASE-XIA-04556] c14 N69-27484
Spherical measurement device
[NASA-CASE-XIA-06683] c14 N72-28436

SWINGLE, E. L.
Compact solar still Patent
[NASA-CASE-XMS-04533] c15 N71-23086

SWIRSKI, B. D.
Method of fabricating an object with a thin wall
having a precisely shaped slit
[NASA-CASE-LAR-10409-1] c31 N74-21059

SWORDS, E. B.
Adjustable force probe
[NASA-CASE-MFS-20760] c14 N72-33377

SYDNOR, R. L.
Ultra stable frequency distribution system
[NASA-CASE-MFO-13836-1] c32 N76-31373

SYVERTSON, C. A.
Flight craft Patent
[NASA-CASE-XAC-02058] c02 N71-16087

T

TADDEO, F. V.
Pulse generating circuit employing switch means
on ends of delay line for alternately charging
and discharging same Patent
[NASA-CASE-XNP-00745] c10 N71-28960

TALBOT, H. W.
Protection for energy conversion systems
[NASA-CASE-XGS-04808] c03 N69-25146
Inverter with means for base current shaping for
sweeping charge carriers from base region Patent
[NASA-CASE-XGS-06226] c10 N71-25950

TALLEY, D. H.
Response analyzers for sensors Patent
[NASA-CASE-MFS-11204] c14 N71-29134

TANPLEY, J. L.
Static coefficient test method and apparatus
[NASA-CASE-GSC-11893-1] c35 N76-31489

TASHEAR, P. W.
System for depositing thin films
[NASA-CASE-MFS-26775-1] c31 N75-12161

TAUB, W. E.
Radial module space station Patent
[NASA-CASE-XMS-01906] c31 N70-41373

TAUSWORTHE, E. C.
Space vehicle system
[NASA-CASE-MSC-12561-1] c18 N76-17185

Filter for third order phase locked loops
[NASA-CASE-MFC-11941-1] c10 N73-27171

Phase conjugation method and apparatus for an
active retrodirective antenna array
[NASA-CASE-MFO-13641-1] c32 N77-24340

TAYLOR, C. J.
High resolution developing of photosensitive
resists Patent
[NASA-CASE-XGS-04993] c14 N71-17574

TAYLOR, L. L.
Flexible composite membrane Patent
[NASA-CASE-XNP-06637] c18 N71-16210

TAYLOR, L. V.
Plural position switch status and operativeness
checker Patent
[NASA-CASE-XLA-08799] c10 N71-27272

TAYLOR, E. A.
Digital computing cardiometer
[NASA-CASE-MFS-20284-1] c52 N74-12778

TAYLOR, E. C.
Multi axes vibration fixtures
[NASA-CASE-MFS-20242] c14 N73-19421

TAYLOR, E. E.
Automatic acquisition system for phase-lock loop
[NASA-CASE-XGS-04994] c09 N69-21543

Polarization diversity wavepulse tracking
receiver Patent
[NASA-CASE-XGS-03501] c09 N71-20864

Electromagnetic polarization systems and methods
Patent
[NASA-CASE-GSC-10021-1] c09 N71-24595

TCHENBY, D. I.
Variable frequency nuclear magnetic resonance
spectrometer Patent
[NASA-CASE-XNP-05830] c14 N71-26266

TE POIL, E. E.
Television signal scan rate conversion system
Patent
[NASA-CASE-XMS-07168] c07 N71-11300

TEGWELIA, C. E.
Digital second-order phase-locked loop
[NASA-CASE-MFO-11905-1] c33 N74-12887

TEITELBAUM, S.
Frequency shift keyed demodulator Patent
[NASA-CASE-XGS-02889] c07 N71-11282

TELFER, I. A.
Method of determining bond quality of power
transistors attached to substrates
[NASA-CASE-MFS-21931-1] c37 N75-26372

TENNE, W. E.
Cryogenic liquid sensor
[NASA-CASE-MFO-10619-1] c35 N77-21393

TENG, E. E.
Collapsible pistons
[NASA-CASE-MSC-13789-1] c11 N73-32152

TENOSO, E. J.
Water system virus detection
[NASA-CASE-MSC-16098-1] c51 N77-24755

TEPPER, E. E.
Regenerable device for scrubbing breathable air
of CO2 and moisture without special heat
exchanger equipment
[NASA-CASE-MSC-14771-1] c54 N77-32722

TERE, L. S.
Gas compression analysis
[NASA-CASE-MSC-14757-1] c37 N76-13496

TERRAI, A.
Method of making an apertured casting
[NASA-CASE-LFW-11169-1] c37 N76-23570

TERSELTIC, E. A.
Split welding chamber Patent
[NASA-CASE-LFW-11531] c15 N71-14932

TESINSKY, J. S.
Flexible pile thermal barrier seal
[NASA-CASE-MSC-19568-1] c37 N76-23585

TETSUKA, G. E.
Single or joint amplitude distribution analyzer
Patent
[NASA-CASE-XNP-01383] c09 N71-10659

THALER, S.
Voltage regulator Patent
[NASA-CASE-EBC-10113] c09 N71-27053

Current dependent filter inductance
[NASA-CASE-EBC-10139] c09 N72-17154

THALLER, L. E.
Combined electrolysis device and fuel cell and
method of operation Patent
[NASA-CASE-XLE-01645] c03 N71-20904

Electrically rechargeable REDOX flow cell
[NASA-CASE-LFW-12220-1] c44 N77-14581

THIBODAUX, J. G., JR.
Spherical solid-propellant rocket motor Patent
[NASA-CASE-XLA-00105] c28 N70-33331

Handrel for shaping solid propellant rocket fuel
into a motor casing Patent
[NASA-CASE-XLA-00304] c27 N70-34783

Method of making a solid propellant rocket motor
Patent
[NASA-CASE-XLA-04126] c28 N71-26779

Solid propellant rocket motor and method of
making same
[NASA-CASE-XLA-1349] c20 N77-17143

THIEL, A. E.
Aligning and positioning device Patent
[NASA-CASE-XMS-04178] c15 N71-22798

THIELB, C.
Space simulator Patent
[NASA-CASE-XNP-00459] c11 N70-38675

THIELB, C. L.
A thermal energy transformer
[NASA-CASE-MFO-14058-1] c44 N77-30616

THOLE, J. H.
Inflation system for balloon type satellites
Patent
[NASA-CASE-XGS-03351] c31 N71-16081

THOM, K.
Magnetically controlled plasma accelerator Patent
[NASA-CASE-XLA-00327] c25 N71-29184

Nonequilibrium radiation nuclear reactor
[NASA-CASE-EBCN-10841-1] c73 N75-22108

THOMAS, D. F., JR.
Jet shoes
[NASA-CASE-XLA-08491] c05 N69-21380

One hand backpack harness
[NASA-CASE-LAR-10102-1] c05 N72-23085

Kinesthetic control simulator
[NASA-CASE-LAR-10276-1] c09 N75-15662

THOMAS, E. H.
Electronic motor control system Patent
[NASA-CASE-XNP-01129] c09 N70-38712

THOMAS, E. E.
Optical communications system Patent
[NASA-CASE-XLA-01090] c07 N71-12389

Optical communications system Patent
[NASA-CASE-XLA-01090] c16 N71-28963

THOMAS, E. L.
Optical alignment device
[NASA-CASE-ABC-10932-1] c74 N76-22993

THOMAS, E. D.
Thermocouple tape
[NASA-CASE-LFW-11072-1] c14 N73-24472

Thermocouple tape
[NASA-CASE-LFW-11072-2] c35 N76-15434

Multi-cell battery protection system
[NASA-CASE-LFW-12039-1] c44 N76-23713

THOMASON, E. E.
Trigonometric vehicle guidance assembly which
aligns the three perpendicular axes of two
three-axes systems Patent
[NASA-CASE-XNP-00684] c21 N71-21688

Azimuth laying system Patent
[NASA-CASE-XNP-01669] c21 N71-23289

THOMPSON, G. D., JR.
Cascaded complementary pair broadband transistor
amplifiers Patent
[NASA-CASE-MFO-10003] c10 N71-26415

THOMPSON, J. E., JR.
Inflatable transpiration cooled nozzle
[NASA-CASE-MFS-20619] c28 N72-11708

THOMPSON, E. E.
On-film optical recording of camera lens settings
[NASA-CASE-MSC-12363-1] c14 N73-26431

THOMPSON, A. E.
Pulsed energy power system Patent
[NASA-CASE-MSC-13112] c03 N71-11057

THOMPSON, J. A. L.
Wind measurement system
[NASA-CASE-MFS-23362-1] c47 N77-10753

THORNTON, G. E.
Hole cutter
[NASA-CASE-NFS-22649-1] c37 N75-25186

THORNHALL, J. C.
Regulated dc to dc converter
[NASA-CASE-XES-03429] c03 N69-21330
Pulse-type magnetic core memory element circuit
with blocking oscillator feedback Patent
[NASA-CASE-XES-03303] c08 N71-18595
Stepping motor control circuit Patent
[NASA-CASE-GSC-10366-1] c10 N71-18772

THORPE, B. S.
Reinforced structural plastics
[NASA-CASE-LIW-10199-1] c27 N74-23125

THYS, P. C.
Droplet monitoring probe
[NASA-CASE-NFO-10985] c14 N73-20478

TIBBETTS, W. C.
Apparatus and method for protecting a
photographic device Patent
[NASA-CASE-NFO-10174] c14 N71-18465

TICKNER, E. G.
Liquid cooled brassiere and method of diagnosing
malignant tumors therewith
[NASA-CASE-AEC-11007-1] c52 N77-14736

TIEFERHAWK, H. W.
Optical torque meter Patent
[NASA-CASE-XIE-00503] c14 N70-34818

TILLER, W. G.
Device for measuring bearing preload
[NASA-CASE-NFS-20434] c11 N72-25288

TINN, J. D.
Counter Patent
[NASA-CASE-XNP-06234] c10 N71-27137

TINOB, U.
Multichannel telemetry system
[NASA-CASE-NFO-11572] c07 N73-16121
Receiver with an improved phase lock loop in a
multichannel telemetry system with suppressed
carrier
[NASA-CASE-NFO-11593-1] c07 N73-28012

TINLING, B. E.
Stabilization of gravity oriented satellites
Patent
[NASA-CASE-XAC-01591] c31 N71-17729

TISCHLER, H. F.
Probes having ring and primary sensor at same
potential to prevent collection of stray wall
currents in ionized gases
[NASA-CASE-XIX-00690] c25 N69-39884

TITLE, A. E.
Partial polarizer filter
[NASA-CASE-GSC-12225-1] c74 N77-30935

TITOS, L. E.
Wide power range microwave feedback controller
[NASA-CASE-GSC-12146-1] c33 N77-21322

TOBIAS, B. A.
Thermostatic actuator
[NASA-CASE-NFO-10637] c15 N72-12409
Thermal motor
[NASA-CASE-NFO-11283] c09 N72-25260

TOCK, B. W.
Mixture separation cell Patent
[NASA-CASE-XMS-02952] c18 N71-20742

TODD, E. E.
Method of producing refractory bodies having
controlled porosity Patent
[NASA-CASE-IEM-10393-1] c17 N71-15468
Shock tube powder dispersing apparatus Patent
[NASA-CASE-XIX-04946] c17 N71-24911

TOFT, A. E.
Star tracking reticles and process for the
production thereof
[NASA-CASE-GSC-11188-2] c21 N73-19630
Star tracking reticles
[NASA-CASE-GSC-11188-1] c14 N73-32320
Formation of star tracking reticles
[NASA-CASE-GSC-11188-3] c74 N74-20008

TOLL, T. A.
Variable sweep wing aircraft Patent
[NASA-CASE-XIA-00221] c02 N70-33266

TOLSON, B. A.
Cable stabilizer for open shaft cable operated
elevators
[NASA-CASE-KSC-10513] c15 N72-25453

TOM, B. Y.
Ionene membrane separator
[NASA-CASE-NFO-11091] c18 N72-22567

TOMLINSON, L. E.
Temperature sensitive flow regulator Patent
[NASA-CASE-NFS-14259] c15 N71-19213

TONGIER, M., JR.
Absolute focus lock for microscopes
[NASA-CASE-LAR-10184] c14 N72-22445

TOOLE, P. C.
High speed direct binary-to-binary coded decimal
converter
[NASA-CASE-KSC-10326] c08 N72-21197
High speed direct binary to binary coded decimal
converter and scaler
[NASA-CASE-KSC-10595] c08 N73-12176
Compact bi-phase pulse coded modulation decoder
[NASA-CASE-KSC-10834-1] c33 N76-14371

TOPITS, A., JR.
High impact pressure regulator Patent
[NASA-CASE-NFO-10175] c14 N71-18625
Apparatus for forming drive belts
[NASA-CASE-NFO-13205-1] c31 N74-32917

TORNEY, F. L., JR.
Ultrahigh vacuum gauge having two collector
electrodes
[NASA-CASE-LAR-02743] c14 N73-32324

TOTH, L. E.
Belleville spring assembly with elastic guides
[NASA-CASE-XNP-09452] c15 N69-27504

TOWNES, C. E.
Optical frequency waveguide Patent
[NASA-CASE-BQN-10541-1] c07 N71-26291
Laser machining apparatus Patent
[NASA-CASE-BQN-10541-2] c15 N71-27135
Optical frequency waveguide and transmission
system Patent
[NASA-CASE-BQN-10541-4] c16 N71-27183
Optical frequency waveguide and transmission
system
[NASA-CASE-BQN-10541-3] c23 N72-23695

TOWNSEND, H. E.
Digital telemetry system Patent
[NASA-CASE-XGS-01812] c07 N71-23001

TOY, M. S.
New polymers of perfluorobutadiene and method of
manufacture Patent application
[NASA-CASE-NFO-10863] c06 N7C-11251
Method of polymerizing perfluorobutadiene Patent
application
[NASA-CASE-NFO-10447] c06 N70-11252
Reaction of fluorine with polyperfluoropolyenes
[NASA-CASE-NFO-10862] c06 N72-22107
Polymers of perfluorobutadiene and method of
manufacture
[NASA-CASE-NFO-10863-2] c06 N72-25152
Utilization of oxygen difluoride for syntheses
of fluoropolymers
[NASA-CASE-NFO-12061-1] c27 N76-16228
Process for producing flame resistant polyamides
and products produced thereby
[NASA-CASE-NSC-16074-1] c27 N77-14262

TRADER, A. G.
Subgravity simulator Patent
[NASA-CASE-XMS-04798] c11 N71-21474
Pneumatic amplifier Patent
[NASA-CASE-NSC-12121-1] c15 N71-27147

TRAVIS, E. W.
Satellite appendage tie down cord Patent
[NASA-CASE-XGS-02554] c31 N71-21064

TRILEASE, R. E.
Hydraulic casting of liquid polymers Patent
[NASA-CASE-XNP-07659] c06 N71-22975

TRUBY, E. C.
Method of manufacturing semiconductor devices
using refractory dielectrics
[NASA-CASE-XER-08476-1] c26 N72-17820

TRUBY, E. L.
Location identification system
[NASA-CASE-IEC-10324] c07 N72-25173

TRIMPI, E. L.
Combustion detector
[NASA-CASE-LAR-10739-1] c14 N73-16484

TRIOLO, J. J.
Apparatus for controlling the temperature of
balloon-borne equipment
[NASA-CASE-GSC-11620-1] c34 N74-23039

TRIPP, C. E.
Booster tank system Patent
[NASA-CASE-NSC-12390] c27 N71-29155

TRISCHLER, F. D.
Polyurethanes of fluorine containing

polycarbonates
 [NASA-CASE-MFS-10512] c06 N73-30099
 Polyurethanes from fluoralkyl propyleneglycol
 polyethers
 [NASA-CASE-MFS-10506] c06 N73-30100
 Fluorohydroxy ethers
 [NASA-CASE-MFS-10507] c06 N73-30101
 Highly fluorinated polymers
 [NASA-CASE-MFS-11452] c06 N73-30102
 Fluorine containing polyurethane
 [NASA-CASE-MFS-10509] c06 N73-30103
TROST, R. P.
 Data compression system with a minimum time
 delay unit Patent
 [NASA-CASE-XNF-08832] c08 N71-12506
TROUT, O. P., JR.
 Heat protection apparatus Patent
 [NASA-CASE-XLA-06892] c33 N71-17897
TROWBRIDGE, E. I.
 Independent gain and bandwidth control of a
 traveling wave maser
 [NASA-CASE-NFO-13801-1] c36 N76-31514
 Swept group delay measurement
 [NASA-CASE-NFO-13909-1] c33 N77-17358
TRUBERT, M. E.
 Collapsible structure for an antenna reflector
 [NASA-CASE-NFC-11751] c07 N73-24176
TRUSCH, R. B.
 Condensate removal device for heat exchanger
 [NASA-CASE-MSC-14143-1] c77 N75-20139
TRUSSELL, D. B.
 High intensity heat and light unit Patent
 [NASA-CASE-XIA-00141] c09 N70-33312
TSCHUNKO, H. P. A.
 Optical mirror apparatus Patent
 [NASA-CASE-EBC-10001] c23 N71-24868
 Electromechanical control actuator system Patent
 [NASA-CASE-EBC-10022] c15 N71-26635
 Optical system support apparatus
 [NASA-CASE-XFR-07896-2] c23 N72-22673
TSUDA, G. I.
 High efficiency multifrequency feed
 [NASA-CASE-GSC-11909] c32 N74-20863
TSUTSUMI, R.
 Hydraulic drive mechanism Patent
 [NASA-CASE-XMS-03252] c15 N71-10658
TUBBS, H. E.
 Continuous detonation reaction engine Patent
 [NASA-CASE-XMF-06926] c28 N71-22983
TUCKER, E. M.
 Coupling device
 [NASA-CASE-XMS-07846-1] c09 N69-21927
 Space suit heat exchanger Patent
 [NASA-CASE-XMS-09571] c05 N71-19439
 Extravehicular tunnel suit system Patent
 [NASA-CASE-MSC-12243-1] c05 N71-24728
TUGGLE, R. W.
 Apparatus for assembling space structure
 [NASA-CASE-MFS-23579-1] c12 N77-31213
TUNULIY, W. I., JR.
 Minimech self-deploying boom mechanism
 [NASA-CASE-GSC-10566-1] c15 N72-18477
TONG, Y.
 Liquid waste feed system
 [NASA-CASE-LAR-10365-1] c05 N72-27102
TORK, R. E.
 Fabrication of controlled-porosity metals Patent
 [NASA-CASE-XNF-04339] c17 N71-29137
TURNAGE, J. B.
 Flame detector operable in presence of proton
 radiation
 [NASA-CASE-MFS-21577-1] c19 N74-29410
TURNER, J. W.
 Measurement system
 [NASA-CASE-MFS-20658-1] c14 N73-30386
TURNER, R. C.
 Thermocouple assembly Patent
 [NASA-CASE-XNF-01659] c14 N71-23039
TURNER, R. E.
 Anemometer with braking mechanism Patent
 [NASA-CASE-XNF-05224] c14 N71-23726
 Maxometers (peak wind speed anemometers)
 [NASA-CASE-MFS-20916] c14 N73-25460
TURNER, T. R.
 Double hinged flap Patent
 [NASA-CASE-XLA-01290] c02 N70-42016
TUTTLE, S. A.
 Application of luciferase assay for ATP to
 antimicrobial drug susceptibility
 [NASA-CASE-GSC-12039-1] c51 N77-22794
TVETAN, W.
 Data compression system
 [NASA-CASE-XNF-09785] c08 N65-21928
TYAGI, R. C.
 High field CdS detector for infrared radiation
 [NASA-CASE-LAR-11027-1] c35 N74-18088
 Vapor phase growth of groups 3-5 compounds by
 hydrogen chloride transport of the elements
 [NASA-CASE-LAR-11144-1] c25 N75-26043
TYCZ, M.
 Apparatus for simulating optical transmission
 links
 [NASA-CASE-GSC-11877-1] c74 N76-18913
TYLER, A. L.
 Helical recorder arrangement for multiple
 channel recording on both sides of the tape
 [NASA-CASE-GSC-10614-1] c09 N72-11224
 System for stabilizing torque between a balloon
 and gondola
 [NASA-CASE-GSC-11077-1] c02 N73-13008

U

UBER, P. W.
 Tape recorder Patent
 [NASA-CASE-IGS-08259] c14 N71-23698
ULBICH, B. E.
 Aircraft-mounted crash-activated transmitter
 device
 [NASA-CASE-MFS-16609-3] c03 N76-32140
ULBICH, D. B.
 Screened circuit capacitors
 [NASA-CASE-LAR-10294-1] c26 N72-28762
UNDERWOOD, J. E.
 Collimator of multiple plates with axially
 aligned identical random arrays of apertures
 [NASA-CASE-MFS-20546-2] c14 N73-30389
 Multiplate focusing collimator
 [NASA-CASE-MFS-20932-1] c35 N75-19616
UPDIKE, O. L.
 Apparatus for measuring a sorbate dispersed in a
 fluid stream
 [NASA-CASE-ARC-10896-1] c34 N75-32389
UPTON, D. T.
 Camera arrangement
 [NASA-CASE-GSC-12032-2] c35 N76-19408
URBAN, E. W.
 Direct current transformer
 [NASA-CASE-MFS-23659-1] c33 N77-20341
URSBY, B. C.
 Collapsible nozzle extension for rocket engines
 Patent
 [NASA-CASE-MFS-11497] c28 N71-16224

V

VALENTIJN, R. P.
 Roll-up solar array Patent
 [NASA-CASE-NFO-10188] c03 N71-20273
 Deployable solar cell array
 [NASA-CASE-NFO-10883] c31 N72-22874
VALINSKY, J. F.
 Device for monitoring a change in mass in
 varying gravimetric environments
 [NASA-CASE-MFS-21556-1] c35 N74-26945
VALLOTTON, W. C.
 An artificial leg employing a mechanical energy
 storage device for hip disarticulation
 [NASA-CASE-ARC-10916-1] c54 N76-26871
 Anthropomorphic master/slave manipulator system
 [NASA-CASE-ARC-10756-1] c54 N77-32721
VANALSTINE, E. M.
 Spacecraft Patent
 [NASA-CASE-MSC-13047-1] c31 N71-25434
VANARNAM, D. E.
 Pneumatic system for controlling and actuating
 pneumatic cyclic devices
 [NASA-CASE-XMS-04843] c03 N69-21469
VANATTA, L. C.
 Circularly polarized antenna
 [NASA-CASE-EBC-10214] c09 N72-31235
VANAUSEN, B.
 Reinforced polyquinoxaline gasket and method of
 preparing the same
 [NASA-CASE-MFS-21364-1] c37 N74-18126
VANDEBRIET, E. K.
 Magnetic power switch Patent
 [NASA-CASE-NFO-10242] c09 N71-24803

- VANGO, S. F.
Liquid junction and method of fabricating the same Patent Application
[NASA-CASE-NFO-10682] c15 N70-34699
Flexible composite membrane Patent
[NASA-CASE-IXF-08637] c18 N71-16210
- VANO, A. E.
Quick attach mechanism Patent
[NASA-CASE-IXF-05421] c15 N71-22994
- VANOREN, D. G.
Electric arc light source having undercut recessed anode
[NASA-CASE-ARC-10266-1] c33 N75-29318
- VANSCHOIACK, M. E. E.
High impedance measuring apparatus Patent
[NASA-CASE-YMS-08589-1] c09 N71-20569
- VANSTUHLRUSCH, W.
Millimeter wave radiometer for radio astronomy Patent
[NASA-CASE-IXF-09832] c30 N71-23723
- VARGO, D. J.
Ophthalmic method and apparatus
[NASA-CASE-LFW-11669-1] c05 N73-27062
- VARY, A.
Triode thermionic energy converter
[NASA-CASE-IXE-01015] c03 N69-39898
High temperature heat source Patent
[NASA-CASE-IXE-00490] c33 N70-34545
Radiant heater having formed filaments Patent
[NASA-CASE-IXE-00387] c33 N70-34812
Inductive liquid level detection system Patent
[NASA-CASE-IXE-01609] c14 N71-10500
Capillary radiator Patent
[NASA-CASE-IXE-03307] c33 N71-14035
Thermionic converter with current augmented by self induced magnetic field Patent
[NASA-CASE-IXE-01903] c22 N71-23599
Cyclic switch Patent
[NASA-CASE-LFW-10155-1] c09 N71-29035
- VAUGHAN, G. E.
Phase locked phase modulator including a voltage controlled oscillator Patent
[NASA-CASE-IXF-05382] c10 N71-23544
- VAUGHAN, O. E.
Emergency lunar communications system
[NASA-CASE-MFS-21042] c07 N72-25171
- VAUGHAN, R. L.
Electrolytic cell structure
[NASA-CASE-LAR-11042-1] c33 N75-27252
- VAUGHAN, R. V.
Capillary flow weld-bonding
[NASA-CASE-LAR-11726-1] c37 N76-27568
Weld-bonded titanium structures
[NASA-CASE-LAR-11549-1] c37 N77-11397
- VAUSE, C. E.
Acoustically swept rotor
[NASA-CASE-ARC-11106-1] c05 N77-31130
- VEIKINS, O.
Apparatus for establishing flow of a fluid mass having a known velocity
[NASA-CASE-MFS-21424-1] c34 N74-27730
- VEILLETTE, L. J.
Angular position and velocity sensing apparatus Patent
[NASA-CASE-IGS-05680] c14 N71-17585
Bidirectional step torque filter with zero backlash characteristic Patent
[NASA-CASE-IGS-04227] c15 N71-21744
Control apparatus for applying pulses of selectively predetermined duration to a sequence of loads Patent
[NASA-CASE-IGS-04224] c10 N71-26418
Synchronous dc direct drive system Patent
[NASA-CASE-GSC-10065-1] c10 N71-27136
Axially and radially controllable magnetic bearing
[NASA-CASE-GSC-11551-1] c37 N76-18459
- VELLEND, B.
Application of luciferase assay for ATP to antimicrobial drug susceptibility
[NASA-CASE-GSC-12039-1] c51 N77-22794
Determination of antimicrobial susceptibilities of infected urines without isolation
[NASA-CASE-GSC-12046-1] c52 N77-26797
- VERMILLION, C. E.
Pacivile video remodulation network
[NASA-CASE-GSC-10185-1] c07 N72-12081
- VERMILLION, C. E.
Resistance soldering apparatus
[NASA-CASE-GSC-10913] c15 N72-22491
- VESSOT, R. F. C.
Atomic hydrogen maser with bulb temperature control to remove wall shift in maser output frequency
[NASA-CASE-BCH-10654-1] c16 N73-13489
Tunable cavity resonator with ramp shaped supports
[NASA-CASE-BCH-10790-1] c36 N74-11313
- VICK, L. B.
Method of obtaining permanent record of surface flow phenomena Patent
[NASA-CASE-XLA-01353] c14 N70-41366
- VICK, H. A.
Blood pressure measuring system for separating and separately recording dc signal and an ac signal Patent
[NASA-CASE-XMS-06061] c05 N71-23317
- VICKERS, J. H. F.
Intermittent type silica gel adsorption refrigerator Patent
[NASA-CASE-IXF-00920] c15 N71-15906
- VILLARREAL, S.
Receiving and tracking phase modulated signals
[NASA-CASE-MSC-16170-1] c32 N77-12248
- VINAL, A. W.
Redundant memory organization Patent
[NASA-CASE-GSC-10564] c10 N71-29135
- VINCENT, J. S.
Method of forming thin window drifted silicon charged particle detector Patent
[NASA-CASE-XLB-00808] c24 N71-10560
- VINE, J.
Magnifying image intensifier
[NASA-CASE-GSC-12010-1] c33 N76-23482
- VIVIAN, H. C.
Photosensitive device to detect bearing deviation Patent
[NASA-CASE-IXE-00438] c21 N70-35089
Space vehicle attitude control Patent
[NASA-CASE-IXF-00465] c21 N70-35395
Remodulator filter Patent
[NASA-CASE-MFO-10198] c09 N71-24806
- VODICKA, V. E.
Magnetic recording head and method of making same Patent
[NASA-CASE-GSC-10097-1] c08 N71-27210
- VOGELY, A. W.
Cable arrangement for rigid tethering Patent
[NASA-CASE-XLA-02332] c32 N71-17609
Combined optical attitude and altitude indicating instrument Patent
[NASA-CASE-XLA-01907] c14 N71-23268
- VOLKOFF, J. J.
Electro-optical scanning apparatus Patent
Application
[NASA-CASE-MFO-11106] c14 N70-34697
- VOLPE, F. A.
Sun tracker with rotatable plane-parallel plate and two photocells Patent
[NASA-CASE-IGS-01159] c21 N71-10678
Attitude control system Patent
[NASA-CASE-IGS-04393] c21 N71-14159
Star scanner
[NASA-CASE-GSC-11569-1] c89 N74-30886
- VONFRAGENAU, G. L.
Support apparatus for dynamic testing Patent
[NASA-CASE-IXF-01772] c11 N70-41677
Hydraulic support for dynamic testing Patent
[NASA-CASE-IXF-03248] c11 N71-10604
Space vehicle
[NASA-CASE-MFS-22734-1] c18 N75-19329
Translatory shock absorber for attitude sensors
[NASA-CASE-MFS-22905-1] c19 N76-22284
Attitude control system
[NASA-CASE-MFS-22787-1] c15 N77-10113
- VONTSENNHAUSEN, G. F.
Energy absorbing device Patent
[NASA-CASE-IXF-10040] c15 N71-22877
- VORNABEN, E. E.
System for producing chroma signals
[NASA-CASE-MSC-14683-1] c74 N77-18893
- VORNIK, H. G.
Variable frequency nuclear magnetic resonance spectrometer Patent
[NASA-CASE-IXF-09830] c14 N71-26266
- VRANAS, T.
Impact energy absorber Patent
[NASA-CASE-XLA-01530] c14 N71-23092
High temperature strain gage calibration fixture
[NASA-CASE-LAR-11500-1] c35 N76-24523

VUKELICH, E. K.
Method and device for detecting voids in low density material Patent
[NASA-CASE-NFS-20044] c14 N71-28993

VYUKAL, B. C.
Universal pilot restraint suit and body support therefor Patent
[NASA-CASE-XAC-C0405] c05 N70-41819
Hard space suit Patent
[NASA-CASE-XAC-07043] c05 N71-23161
Locomotion and restraint aid Patent
[NASA-CASE-ARC-10153] c05 N71-28619
Space suit having improved waist and torso movement
[NASA-CASE-ARC-10275-1] c05 N72-22092
A walking foot assembly
[NASA-CASE-ARC-11101-1] c54 N77-14742
An improved cooling system for removing metallic heat from an hermetically sealed spacesuit
[NASA-CASE-ARC-11059-1] c54 N77-14743
Spacesuit mobility joints
[NASA-CASE-ARC-11058-1] c54 N77-15641
Spacesuit torso closure
[NASA-CASE-ARC-11100-1] c54 N77-25784
Anthropomorphic master/slave manipulator system
[NASA-CASE-ARC-10756-1] c54 N77-32721

W

WADE, O. W.
Method and apparatus for tensile testing of metal foil
[NASA-CASE-IAR-10208-1] c35 N76-18400

WAGES, C. G.
Ultrasonic scanning system for in-place inspection of brazed tube joints
[NASA-CASE-NFS-2C767-1] c38 N74-15130

WAGNER, A. P.
Inverter ratio failure detector
[NASA-CASE-NFO-13160-1] c35 N74-18090

WAGNER, C. A.
Rotating raster generator
[NASA-CASE-FRC-10071-1] c32 N74-20813

WAGNER, B. B.
Collapsible loop antenna for space vehicle Patent
[NASA-CASE-IMP-00437] c07 N70-40202

WAKELYN, W. I.
Production of high purity silicon carbide Patent
[NASA-CASE-XIA-00158] c26 N70-36805
Apparatus for producing high purity silicon carbide crystals Patent
[NASA-CASE-XIA-02057] c26 N70-40015
Method of coating carbonaceous base to prevent oxidation destruction and coated base Patent
[NASA-CASE-XIA-00284] c15 N71-16075
Method of coating carbonaceous base to prevent oxidation destruction and coated base Patent
[NASA-CASE-XIA-00302] c15 N71-16077
Thermal control coating Patent
[NASA-CASE-XIA-01995] c18 N71-23047

WALD, D.
Differential temperature transducer Patent
[NASA-CASE-XAC-00812] c14 N71-15598

WALKER, D. J.
Flame detector operable in presence of proton radiator
[NASA-CASE-NFS-21577-1] c19 N74-29410

WALKER, B. B.
Space environmental work simulator Patent
[NASA-CASE-IMP-07488] c11 N71-18773

WALKER, W. L.
Lightweight reflector assembly
[NASA-CASE-NFO-13707-1] c74 N77-28933

WALL, R. J.
Automated clinical system for chromosome analysis
[NASA-CASE-NFO-13913-1] c52 N77-19750

WALL, W. A., JR.
Apparatus for welding torch angle and seam tracking control Patent
[NASA-CASE-IMP-03287] c15 N71-15607
Automatic closed circuit television arc guidance control Patent
[NASA-CASE-NFS-13046] c07 N71-19433
Automatic welding speed controller Patent
[NASA-CASE-IMP-01730] c15 N71-23050
Welding skate with computerized control Patent
[NASA-CASE-IMP-07069] c15 N71-23815

Internal flare angle gauge Patent
[NASA-CASE-IMP-04415] c14 N71-24693
Computerized system for translating a torch head
[NASA-CASE-NFS-23620-1] c37 N77-24497

WALLACE, B. D.
Apparatus for tensile testing Patent
[NASA-CASE-XKS-06250] c14 N71-15600
Valve seat with resilient support member Patent
[NASA-CASE-XKS-02582] c15 N71-21234
Weld preparation machine Patent
[NASA-CASE-XKS-07953] c15 N71-26134

WALLACE, G. B.
Pseudo-noise test set for communication system evaluation
[NASA-CASE-NFS-22671-1] c35 N75-21582
Method of and means for testing a tape record/playback system
[NASA-CASE-NFS-22671-2] c35 N77-17426

WALLINGFORD, W. B.
Differential phase shift keyed communication system
[NASA-CASE-MSC-14065-1] c32 N74-26654
Differential phase shift keyed signal resolver
[NASA-CASE-MSC-14066-1] c33 N74-27705

WALLIO, M. A.
Electric-arc heater Patent
[NASA-CASE-XLA-00330] c33 N70-34540

WALSH, J. B.
Specific wavelength colorimeter
[NASA-CASE-MSC-14081-1] c35 N74-27860

WALSH, T. C.
Vibration damping system Patent
[NASA-CASE-IMS-01620] c23 N71-15673

WALSH, T. J.
Apparatus for making a metal slurry product Patent
[NASA-CASE-XLE-00010] c15 N70-33382

WALSH, T. B.
Interferometric rotation sensor
[NASA-CASE-ARC-10278-1] c14 N73-25463

WALTER, H. U.
Method of crystallization
[NASA-CASE-NFS-23001-1] c76 N77-32919

WALTERS, B. B.
Telespectrograph Patent
[NASA-CASE-XIA-03273] c14 N71-18699

WALTON, T. S.
Electronic checkout system for space vehicles Patent
[NASA-CASE-XKS-08012-2] c31 N71-15566

WANG, G. Y.
A synchronous binary array divider
[NASA-CASE-FRC-10180-1] c60 N74-20836

WANG, T. G.
Material suspension within an acoustically excited resonant chamber
[NASA-CASE-NFO-13263-1] c12 N75-24774
Heat operated cryogenic electrical generator
[NASA-CASE-NFO-13303-1] c20 N75-24837
Acoustic energy shaping
[NASA-CASE-NFO-13802-1] c71 N76-18886

WARD, D. B.
Automatically deploying nozzle exit cone extension Patent
[NASA-CASE-XLE-01640] c31 N71-15637

WARD, J. C., JR.
Capacitor power pack Patent Application
[NASA-CASE-IAR-10367-1] c03 N70-26817

WARD, J. P.
Variable geometry rotor system
[NASA-CASE-IAR-10557] c02 N72-11018

WARD, J. O.
Digital automatic gain amplifier
[NASA-CASE-KSC-11008-1] c33 N77-21321

WARD, W. D.
Vapor liquid separator Patent
[NASA-CASE-IMP-04042] c15 N71-23023

WARKENTINE, D. K.
Automatic battery charger Patent
[NASA-CASE-IMP-04758] c03 N71-24605

WARNECK, P.
Analytical photoionization mass spectrometer with an argon gas filter between the light source and monochromator Patent
[NASA-CASE-IAR-10180-1] c06 N71-13461

WARREN, A. P.
Assembly for recovering a capsule Patent
[NASA-CASE-IMP-00641] c31 N70-36410
Space capsule ejection assembly Patent
[NASA-CASE-IMP-03169] c31 N71-15675

- Method and apparatus for securing to a spacecraft Patent
[NASA-CASE-MFS-11133] c31 N71-16222
- WATERS, W. J.
Nickel-base alloy Patent
[NASA-CASE-XIE-00283] c17 N70-36616
- Nickel-base alloy containing Mo-W-Al-Cr-Ta-Zr-C-Nb-E Patent
[NASA-CASE-XIE-02082] c17 N71-16026
- Nickel base alloy
[NASA-CASE-XIE-10874-1] c17 N72-22535
- Method of forming superalloys
[NASA-CASE-XIE-10805-1] c15 N73-13465
- Method of heat treating a formed powder product material
[NASA-CASE-XIE-10805-2] c26 N74-10521
- Method of forming articles of manufacture from superalloy powders
[NASA-CASE-XIE-10805-2] c37 N74-13179
- Nickel base alloy
[NASA-CASE-XIE-12270-1] c26 N77-32280
- WATSON, J. D.
Tumbler system to provide random motion
[NASA-CASE-XGS-02437] c15 N69-21472
- WATSON, J. E.
High temperature spark plug Patent
[NASA-CASE-XIE-00660] c28 N70-39925
- WATSON, H. D.
Payload/burned-out motor case separation system Patent
[NASA-CASE-XIA-05369] c31 N71-15687
- WATSON, V. E.
Electric arc apparatus Patent
[NASA-CASE-XAC-01677] c09 N71-20816
- WAYLAND, H. J.
Servo-controlled intravital microscope system
[NASA-CASE-WFC-13214-1] c35 N75-25123
- WEAR, J. D.
Rocket engine Patent
[NASA-CASE-XIE-00382] c28 N70-37980
- WEATERS, G. D.
Pseudo-noise test set for communication system evaluation
[NASA-CASE-MFS-22671-1] c35 N75-21582
- Method of and means for testing a tape record/playback system
[NASA-CASE-MFS-22671-2] c35 N77-17426
- WEAVER, L. B.
Multiple ir-line docking capability for rotating space stations
[NASA-CASE-MFS-20855-1] c15 N77-10112
- WEAVER, O.
Charge injection method and apparatus of producing large area electrets
[NASA-CASE-MFS-23186-1] c33 N76-23483
- WEBB, D. D.
Sprayable low density allator
[NASA-CASE-MFS-23506-1] c24 N77-15105
- WEBB, D. L.
Video sync processor Patent
[NASA-CASE-KSC-10002] c10 N71-25865
- Electronic video editor
[NASA-CASE-KSC-10003] c10 N73-13235
- WEBB, J. A., JR.
Circuit for detecting initial systole and diastolic notch
[NASA-CASE-XIE-11581-1] c54 N75-13531
- WEBB, J. B.
Delayed simultaneous release mechanism
[NASA-CASE-GSC-10814-1] c03 N73-20039
- WEBB, W. C.
Telemetry processor
[NASA-CASE-GSC-11388-1] c07 N73-24187
- WEBBER, E. W.
An improved cooling system for removing metabolic heat from an hermetically sealed spacesuit
[NASA-CASE-ABC-11059-1] c54 N77-14743
- Tubular sublimatory evaporator heat sink
[NASA-CASE-ABC-10972-1] c34 N77-19353
- Spacesuit torso closure
[NASA-CASE-ABC-11100-1] c54 N77-25784
- WEBER, G. B.
Method of making reinforced composite structure
[NASA-CASE-XIE-12619-1] c24 N77-19171
- WEBER, G. J.
Multiple circuit protector device
[NASA-CASE-XNS-02744] c33 N75-27249
- WEBER, L.
Prevention of hydrogen embrittlement of high strength steel by hydrazine compositions
[NASA-CASE-WFO-12122-1] c24 N76-14203
- WEBER, R. J.
Venting vapor apparatus Patent
[NASA-CASE-XIE-00288] c15 N70-34247
- Supersonic-combustion rocket
[NASA-CASE-XIE-11058-1] c20 N74-13502
- WEBSTER, J. A.
Perfluoro alkylene dioxy-bis-(4-phthalic anhydrides and oxy-bis-(perfluoroalkyleneoxyphthalic anhydrides)
[NASA-CASE-MFS-22356-1] c23 N75-30256
- Polyimides of ether-linked aryl tetracarboxylic dianhydrides
[NASA-CASE-MFS-22355-1] c23 N76-15268
- WERTON, J. W.
Reinforced metallic composites Patent
[NASA-CASE-XIE-02428] c17 N70-33288
- Method of making fiber reinforced metallic composites Patent
[NASA-CASE-XIE-00231] c17 N70-38198
- Reinforced metallic composites Patent
[NASA-CASE-XIE-00228] c17 N70-38490
- Method for producing fiber reinforced metallic composites Patent
[NASA-CASE-XIE-03925] c18 N71-22894
- Process for producing dispersion strengthened nickel with aluminum Patent
[NASA-CASE-XIE-06969] c17 N71-24142
- Method of producing refractory composites containing tantalum carbide, hafnium carbide, and hafnium boride Patent
[NASA-CASE-XIE-03940] c18 N71-26153
- Method of making fiber composites
[NASA-CASE-LFW-10424-2-2] c18 N72-25539
- Refractory metal base alloy composites
[NASA-CASE-XIE-03940-2] c17 N72-28536
- WEIDENHAMER, J. B.
Isolation coupling arrangement for a torque measuring system
[NASA-CASE-XIA-04897] c15 N72-22482
- WEIDMAN, D. J.
High intensity heat and light unit Patent
[NASA-CASE-XIA-00141] c09 N70-33312
- WEINGART, J. B.
Stacked solar cell arrays
[NASA-CASE-WFO-11771] c03 N73-20040
- WEINSTEIN, L.
Application of luciferase assay for ATF to antimicrobial drug susceptibility
[NASA-CASE-GSC-12039-1] c51 N77-22794
- Determination of antimicrobial susceptibilities of infected urines without isolation
[NASA-CASE-GSC-12046-1] c52 N77-26797
- WEINSTEIN, M.
Bonding thermoelectric elements to nonmagnetic refractory metal electrodes
[NASA-CASE-XGS-04554] c15 N69-39786
- Segmenting lead telluride-silicon germanium thermoelements Patent
[NASA-CASE-XGS-05718] c26 N71-16037
- WEISS, P. F.
Acquisition and tracking system for optical radar
[NASA-CASE-MFS-20125] c16 N72-13437
- WEISS, S.
Pretreatment method for anti-wettable materials
[NASA-CASE-XNS-03537] c15 N69-21471
- WEITZEL, D. F.
Propellant tank pressurization system Patent
[NASA-CASE-XNP-00650] c27 N71-28929
- WEITZEL, D. E.
Resilience testing device Patent
[NASA-CASE-XIA-08254] c14 N71-26161
- WELCH, W. A.
Gas filter mounting structure
[NASA-CASE-HSC-12297] c14 N72-24457
- WELLING, C. E.
Thermally activated foaming compositions Patent
[NASA-CASE-XAB-10373-1] c18 N71-26155
- WELLMAN, J. B.
Gas flow control device
[NASA-CASE-WFO-11479] c15 N73-13462
- WELLS, A. F.
Water system virus detection
[NASA-CASE-HSC-16098-1] c51 N77-24755

WELLS, B. E.
Apparatus for ejection of an instrument cover
[NASA-CASE-XMF-04132] c15 N69-27502

WELLS, P. E.
Positive displacement flowmeter Patent
[NASA-CASE-XMF-02822] c14 N70-41994
Remote control manipulator for zero gravity
environment
[NASA-CASE-MFS-14405] c15 N72-28495

WELLS, W. B.
Rotable accurate reflector system for telescopes
Patent
[NASA-CASE-WFO-10466] c23 N71-33229

WELLS, W. L.
Electric-arc heater Patent
[NASA-CASE-XLA-00230] c33 N70-34540

WENDT, A. J.
Rotating mandrel for assembly of inflatable
devices Patent
[NASA-CASE-XLA-04143] c15 N71-17687

WENZEL, G. E.
Amplifier drift tester
[NASA-CASE-XMS-05562-1] c09 N69-39986

WERNEB, E. A.
Method and apparatus for making curved
reflectors Patent
[NASA-CASE-XLF-08917] c15 N71-15597
Apparatus for making curved reflectors Patent
[NASA-CASE-XLF-08917-2] c15 N71-24836

WESSELSKI, C. J.
Energy absorbing structure Patent Application
[NASA-CASE-MSC-12279-1] c15 N70-35679
Low onset rate energy absorber
[NASA-CASE-MSC-12279] c15 N72-17450

WEST, B. L.
Device for handling printed circuit cards Patent
[NASA-CASE-MFS-20453] c15 N71-29133

WEST, B. W., JR.
Method and apparatus for making a heat
insulating and ablative structure Patent
[NASA-CASE-XMS-02009] c33 N71-20834

WESTBROOK, B. B.
Electrode construction Patent
[NASA-CASE-FEC-10043-1] c05 N71-11193

WESTER, G. W.
Method and apparatus for automatic load sharing
among paralleled converters
[NASA-CASE-WFO-13832-1] c33 N76-26393
The dc-to-dc converters employing
staggered-phase power switches with two-loop
control
[NASA-CASE-WFO-13812-1] c33 N77-10428
Phase substitution of spare converter for a
failed one of parallel phase staggered
converters
[NASA-CASE-WFO-13812-1] c33 N77-30365

WESTON, K. C.
Heat shield Patent
[NASA-CASE-XMS-CC486] c33 N70-33344

WESTPHAL, J. A.
Method and apparatus for aligning a laser beam
projector Patent
[NASA-CASE-WFO-11C87] c23 N71-29125

WETHORE, J. W.
Aircraft instrument Patent
[NASA-CASE-XLA-00487] c14 N70-40157

WETZLER, D. G.
Thrust-isolating mounting
[NASA-CASE-MFS-21680-1] c18 N74-27397

WEYLER, G. H., JR.
An improved rotatable mass for a flywheel
[NASA-CASE-MFS-23051-1] c37 N76-13500

WEZNER, F. S.
Collapsible reflector Patent
[NASA-CASE-XMS-03454] c09 N71-20658

WHEATLEY, D. G.
Hermetic sealed vibration damper Patent
[NASA-CASE-MSC-10959] c15 N71-26243

WHEELER, R. K.
Method and apparatus for stable silicon dioxide
layers on silicon grown in silicon nitride
ambient
[NASA-CASE-FEC-10073-1] c24 N74-19769

WHEELER, S.
Wind tunnel microphone structure Patent
[NASA-CASE-XMF-00250] c11 N71-28779

WHEELER, S. B.
Fluid containers and resealable septum therefor
Patent
[NASA-CASE-WFO-10123] c15 N71-24835

WEIFFEN, E. L.
Grain refinement control in TIG arc welding
[NASA-CASE-MSC-19095-1] c37 N75-19683

WHIPPLE, D. W.
Microcircuit negative cutter
[NASA-CASE-XLA-09843] c15 N72-27485

WHIPPLE, E. C., JR.
Method and apparatus for determining satellite
orientation utilizing spatial energy sources
Patent
[NASA-CASE-XGS-00466] c21 N70-34297

WHISENANT, J. T.
Inspection gage for boss Patent
[NASA-CASE-XMF-04966] c14 N71-17658

WHITACRE, B. E.
Quick release book tape Patent
[NASA-CASE-XMS-10660-1] c15 N71-25975
Scientific experiment flexible mount
[NASA-CASE-MSC-12372-1] c31 N72-25842

WHITCOMB, R. I.
Airfoil shape for flight at subsonic speeds
[NASA-CASE-LAR-10585-1] c02 N76-22154

WHITE, A. B.
Scientific experiment flexible mount
[NASA-CASE-MSC-12372-1] c31 N72-25842

WHITE, B. C.
Method of making pressurized panel Patent
[NASA-CASE-XLA-08916] c15 N71-29018
Lightweight, variable solidity knitted parachute
fabric
[NASA-CASE-LAR-10776-1] c02 N74-10034

WHITE, P. A.
Coincidence apparatus for detecting particles
[NASA-CASE-XLA-07813] c14 N72-17328

WHITE, J. A.
Magnetically centered liquid column float Patent
[NASA-CASE-XAC-00030] c14 N70-34820

WHITE, W. F.
Dual resonant cavity absorption cell Patent
[NASA-CASE-LAR-10305] c14 N71-26137
Resonant waveguide stark cell
[NASA-CASE-LAR-11352-1] c33 N75-26245

WHITEHEAD, C. W.
Apparatus for inserting and removing specimens
from high temperature vacuum furnaces
[NASA-CASE-LAR-10841-1] c31 N74-27900

WHITFIELD, C. E.
Selective plating of etched circuits without
removing previous plating Patent
[NASA-CASE-XGS-03120] c15 N71-24047

WHITMORE, F. C.
Continuous magnetic flux pump
[NASA-CASE-XMF-01187] c15 N73-28516
Superconductive magnetic-field-trapping device
[NASA-CASE-XMF-01185] c26 N73-28710
Magnetic-flux pump
[NASA-CASE-XMF-01188] c15 N73-J2361

WHITT, W. D.
General purpose rocket furnace
[NASA-CASE-MFS-23460-1] c09 N77-12070

WHITTEN, D. E.
Dual stage check valve
[NASA-CASE-MSC-13587-1] c15 N73-30459

WHITTENBERGER, J. D.
Zirconium modified nickel-copper alloy
[NASA-CASE-LRW-12245-1] c26 N77-20201

WIBERG, R. E.
Combustion products generating and metering device
[NASA-CASE-GSC-11095-1] c14 N72-10375

WIBBE, E. R.
Automatic thermal switch Patent
[NASA-CASE-XMF-03796] c23 N71-15467
Helium refrigerator and method for
decontaminating the refrigerator
[NASA-CASE-WFO-10634] c23 N72-25619
Refrigerated coaxial coupling
[NASA-CASE-WFO-13504-1] c33 N75-30430
Helium refrigerator
[NASA-CASE-WFO-13435-1] c31 N76-14284
Multistation refrigeration system
[NASA-CASE-WFO-13839-1] c31 N77-15219

WIEBE, E. R.
Zeta potential flowmeter Patent
[NASA-CASE-XMF-06509] c14 N71-23226

WIKER, G. A.
Compact artificial hand
[NASA-CASE-WFO-13906-1] c54 N77-32723

- WILEY, P. I.
Temperature regulation circuit Patent
[NASA-CASE-IXF-02792] c14 N71-28958
- WILEY, P. B.
Logarithmic circuit with wide dynamic range
[NASA-CASE-GSC-12145-1] c33 N77-19319
Very narrow band width receiver
[NASA-CASE-GSC-12142-1] c32 N77-20299
- WILGUS, D. S.
Adaptive vector computer system
[NASA-CASE-MSC-13932-1] c62 N74-14920
- WILHELM, E. E.
Extraction and separation of a preferentially
photo-dissociated molecular isotope into
positive and negative ions by means of an
electric field
[NASA-CASE-LFN-12465-1] c72 N76-27967
- WILHITE, W. P.
Micropacked column for a chromatographic system
[NASA-CASE-IXF-04816] c06 N69-39936
- WILKEY, J. W., JR.
Velocity package Patent
[NASA-CASE-XIA-01339] c31 N71-15692
Variable diameter shuttle orbiter
[NASA-CASE-LAR-10706-2] c05 N77-31132
- WILKINS, J. B.
Apparatus for microbiological sampling
[NASA-CASE-LAR-11069-1] c35 N75-12272
Automatic inoculating apparatus
[NASA-CASE-LAR-11074-1] c51 N75-13502
Automatic microbial transfer device
[NASA-CASE-LAR-11354-1] c35 N75-27330
Measurement of gas production of microorganisms
[NASA-CASE-LAR-11326-1] c35 N75-33368
Automated, single-slide staining device
[NASA-CASE-LAR-11649-1] c51 N77-27677
- WILL, R. A.
Process for fabricating SiC semiconductor devices
[NASA-CASE-LFN-12094-1] c76 N76-25049
- WILL, R. W.
Attitude control and damping system for
spacecraft Patent
[NASA-CASE-XLA-02551] c21 N71-21708
- WILLIAMS, B. A.
Thermistor holder for skin temperature
measurements
[NASA-CASE-ARC-1C855-1] c52 N77-10780
Liquid cooled brassiere and method of diagnosing
malignant tumors therewith
[NASA-CASE-ABC-11007-1] c52 N77-14736
An improved cooling system for removing
metabolic heat from an hermetically sealed
spacesuit
[NASA-CASE-ABC-11C59-1] c54 N77-14743
- WILLIAMS, D. D.
Apparatus for changing the orientation and
velocity of a spinning body traversing a path
Patent
[NASA-CASE-EQN-00936] c31 N71-29050
- WILLIAMS, D. E.
Dual mode solid state power switch
[NASA-CASE-MFS-22880-1] c33 N76-31410
Dual mode solid state power switch
[NASA-CASE-MFS-22880-2] c33 N77-31407
- WILLIAMS, D. E.
Low temperature aluminum alloy Patent
[NASA-CASE-IXF-02786] c17 N71-20743
- WILLIAMS, E. F.
Automatic liquid inventory collecting and
dispensing unit
[NASA-CASE-LAR-11071-1] c35 N75-19611
- WILLIAMS, J. G.
Light regulator
[NASA-CASE-LAR-10836-1] c26 N72-27784
Light intensity strain analysis
[NASA-CASE-LAR-1C765-1] c32 N73-20740
- WILLIAMS, J. E.
Holographic thin film analyzer
[NASA-CASE-MFS-20E23-1] c16 N73-30476
- WILLIAMS, M. C.
Nondestructive method for instrumenting
helicopter rotor blades
[NASA-CASE-LAR-11201-1] c35 N77-22452
- WILLIAMS, R. D.
Measurement of time differences between luminous
events Patent
[NASA-CASE-XLA-01987] c23 N71-23976
Volumetric direct nuclear pumped laser
[NASA-CASE-LAR-12183-1] c36 N77-21424
- WILLIAMS, S. B.
Bidirectional step torque filter with zero
backlash characteristic Patent
[NASA-CASE-IGS-04227] c15 N71-21744
- WILLIAMS, T. E.
System for and method of freezing biological
tissue
[NASA-CASE-GSC-12173-1] c52 N77-27693
- WILLIAMS, W. F.
System for interference signal nulling by
polarization adjustment
[NASA-CASE-WFO-13140-1] c34 N75-24982
- WILLIS, A. E.
Static inverters which sum a plurality of waves
Patent
[NASA-CASE-IXF-00663] c08 N71-18752
- WILLNER, K.
Inverter oscillator with voltage feedback
[NASA-CASE-WFO-10760] c09 N72-25254
- WILNER, B. B.
Electrolytically regenerative hydrogen-oxygen
fuel cell Patent
[NASA-CASE-XIE-04526] c03 N71-11052
- WILSON, A. M.
An improved vehicular impact absorption system
[NASA-CASE-WFO-14014-1] c37 N77-31501
- WILSON, D. J.
Wind measurement system
[NASA-CASE-MFS-23362-1] c47 N77-10753
- WILSON, I. J.
Method of producing complex aluminum alloy parts
of high temper. and products thereof
[NASA-CASE-MSC-19693-1] c26 N76-29401
- WILSON, J. C.
Exhaust flow deflector
[NASA-CASE-LAR-11570-1] c34 N76-18364
- WILSON, L. E.
Phase modulating with odd and even finite power
series of a modulating signal
[NASA-CASE-LAR-11607-1] c32 N77-14292
- WILSON, M. L.
Nondestructive spot test method for titanium and
titanium alloys
[NASA-CASE-LAR-10539-1] c17 N73-12547
Nondestructive spot test method for magnesium
and magnesium alloys
[NASA-CASE-LAR-10953-1] c17 N73-27446
- WILSON, M. W., JR.
Space simulator Patent
[NASA-CASE-IXF-00459] c11 N70-38675
- WILSON, R. E.
Automatic pump Patent
[NASA-CASE-IXF-04731] c15 N71-24042
- WILSON, R. L.
Twin-capacitive shaft angle encoder with analog
output signal
[NASA-CASE-ARC-10897-1] c33 N77-31404
- WILSON, T. G.
Regulated dc-to-dc converter for voltage step-up
or step-down with input-output isolation
[NASA-CASE-BQN-10792-1] c33 N74-11049
- WILSON, W. A.
Methods and apparatus employing vibratory energy
for wrenching Patent
[NASA-CASE-MFS-20586] c15 N71-17686
- WILSON, W. O.
Rocket chamber leak test fixture
[NASA-CASE-IXF-09479] c14 N69-27503
- WINBER, R. T.
Silicide coatings for refractory metals Patent
[NASA-CASE-XLE-10910] c18 N71-29040
- WINBLADE, E. L.
Energy management system for glider type vehicle
Patent
[NASA-CASE-IXF-00756] c02 N71-13421
- WINGFIELD, G. A.
Resonant waveguide stark cell
[NASA-CASE-LAR-11352-1] c33 N75-26245
- WINTZ, H.
Amino acid analysis
[NASA-CASE-WFO-12130-1] c25 N75-14844
Reduction of blood serum cholesterol
[NASA-CASE-WFO-12119-1] c52 N75-15270
- WINKELSTEIN, E. A.
Noninterruptable digital counting system Patent
[NASA-CASE-IXF-09759] c08 N71-24891
Controlled oscillator system with a time
dependent output frequency
[NASA-CASE-WFO-11962-1] c33 N74-10194

WINKLER, C. E.
Static inverters which sum a plurality of waves
Patent
[NASA-CASE-XEF-00663] c08 N71-18752

WINKLER, T.
AC logic flip-flop circuits Patent
[NASA-CASE-XGS-00823] c10 N71-15910

WINN, L. E.
Ellipsograph for pantograph Patent
[NASA-CASE-XIA-03102] c14 N71-21079
Lathe tool bit and holder for machining
fiberglass materials
[NASA-CASE-XIA-10470] c15 N72-21489
Liquid waste feed system
[NASA-CASE-XLR-10365-1] c05 N72-27102

WIRTH, E. B.
Selective data segment monitoring system
[NASA-CASE-ABC-10899-1] c60 N77-19760

WISE, R. C.
Space suit
[NASA-CASE-MSC-12609-1] c05 N73-32012

WITTMANN, A. E.
Method of coating circuit paths on printed
circuit boards with solder Patent
[NASA-CASE-XHF-01599] c09 N71-20705

WITTEBOCK, B. E.
Metal shearing energy absorber
[NASA-CASE-BQN-10638-1] c15 N73-30460

WITZKE, W. E.
Apparatus for making a metal slurry product Patent
[NASA-CASE-XIE-00010] c15 N70-33382
High toughness-high strength iron alloy
[NASA-CASE-LEW-12542-1] c26 N77-24254

WOBIG, O. A.
Fluid power transmission Patent
[NASA-CASE-XMS-01445] c12 N71-16031
Apparatus for machining geometric cones Patent
[NASA-CASE-XMS-04292] c15 N71-22722

WOJASINSKI, E. J.
Lightning tracking system
[NASA-CASE-KSC-10728-1] c09 N73-32110
Automatic lightning detection and photographic
system
[NASA-CASE-KSC-10728-1] c14 N73-32319
Electric field measuring and display system
[NASA-CASE-KSC-10731-1] c33 N74-27862
Lightning current measuring systems
[NASA-CASE-KSC-10807-1] c33 N75-26246
Lightning current waveform measuring system
[NASA-CASE-KSC-11018-1] c33 N77-21320

WOLCZOR, J. E.
Wideband heterodyne receiver for laser
communication system
[NASA-CASE-GSC-12053-1] c32 N77-28346

WOLF, P. I.
Air bearing
[NASA-CASE-WLF-10002] c15 N72-17451

WOLFF, J. B.
High speed binary to decimal conversion system
Patent
[NASA-CASE-XGS-01230] c08 N71-19544

WOLLER, J. A.
Evacuation port seal Patent
[NASA-CASE-IMF-03290] c15 N71-23256

WOLOWICZ, C. B.
An improved free wing for an aircraft
[NASA-CASE-YRC-10092-1] c05 N77-31135

WOLFEHUIS, E. J.
Centourograph system for monitoring
electrocardiograms
[NASA-CASE-MSC-12407-1] c10 N72-20225
Apparatus and method for processing Korotkov
sounds
[NASA-CASE-MSC-13999-1] c52 N74-26626

WONG, B. Y.
Plurality of photosensitive cells on a
pyramidal base for planetary trackers
[NASA-CASE-XNF-04180] c07 N69-39736
Apparatus for absorbing and measuring power Patent
[NASA-CASE-XLF-00720] c14 N70-40201
Television signal processing system Patent
[NASA-CASE-WFO-10140] c07 N71-24742
Video signal enhancement system with dynamic
range compression and modulation index
expansion Patent
[NASA-CASE-WFO-10343] c07 N71-27341

WONG, W. J.
Phase protection system for ac power lines
[NASA-CASE-MSC-17832-1] c33 N74-14956

WOO, K. E.
High impact antenna Patent
[NASA-CASE-WFO-10231] c07 N71-26101
Multi-purpose antenna employing dish
reflector with plural coaxial horn feeds
[NASA-CASE-WFO-11264] c07 N72-25174

WOO, B. Y.
Low loss dichroic plate
[NASA-CASE-WFO-13171-1] c32 N74-11000

WOOD, A. D.
Transient heat transfer gauge Patent
[NASA-CASE-XNP-09802] c33 N71-15641

WOOD, G. E.
Simultaneous acquisition of tracking data from
two stations
[NASA-CASE-WFO-13292-1] c32 N75-15854

WOOD, G. H., JR.
Gas analyzer for bi-gaseous mixtures Patent
[NASA-CASE-XIA-01131] c14 N71-10774

WOOD, G. P.
Plasma accelerator Patent
[NASA-CASE-XIA-00675] c25 N70-33267

WOOD, J. W.
Broadband video process with very high input
impedance
[NASA-CASE-WFO-10199] c09 N72-17156

WOOD, L. L.
Continuous plasma light source
[NASA-CASE-XNP-04167-2] c25 N72-24753
Continuous plasma laser
[NASA-CASE-XNP-04167-3] c36 N77-19416

WOOD, P. C.
Process for the preparation of calcium superoxide
[NASA-CASE-ABC-11053-1] c25 N77-29252

WOOD, R. A.
Low temperature aluminum alloy Patent
[NASA-CASE-XMF-02786] c17 N71-20743

WOOD, R. C.
Apparatus for sampling particulates in gases
[NASA-CASE-BQN-10037-1] c14 N73-27376

WOODBURY, E. C.
Noise limiter Patent
[NASA-CASE-WFO-10169] c10 N71-24844
Gated compressor, distortionless signal limiter
[NASA-CASE-WFO-11820-1] c32 N74-19788
Apparatus for scanning the surface of a
cylindrical body
[NASA-CASE-WFO-11861-1] c36 N74-20009

WOODIE, P. E.
Thermal conductive connection and method of
making same Patent
[NASA-CASE-XMS-02087] c09 N70-41717

WOODS, G. J.
Electronic checkout system for space vehicles
Patent
[NASA-CASE-XKS-08012-2] c31 N71-15566

WOODS, G. H., JR.
Instrument for measuring potentials on two
dimensional electric field plots Patent
[NASA-CASE-XIA-08493] c10 N71-19421

WOODS, J. E.
Powerplexer
[NASA-CASE-MSC-12396-1] c03 N73-31988

WOOLAN, J. A.
Atomic hydrogen storage method and apparatus
[NASA-CASE-LEW-12081-1] c28 N76-22399

WOOLFSON, E. G.
Linear sawtooth voltage-wave generator employing
transistor timing circuit having
capacitor-zener diode combination feedback
Patent
[NASA-CASE-XMS-01315] c09 N70-41675
Pulse modulator providing fast rise and fall
times Patent
[NASA-CASE-XMS-04919] c09 N71-23270
Multiple slope sweep generator Patent
[NASA-CASE-XMS-03542] c09 N71-28926

WOOLLAN, J. A.
Hall effect magnetometer
[NASA-CASE-LEW-11632-2] c35 N75-13213

WORMON, D. E.
Leading edge curvature based on convective
heating Patent
[NASA-CASE-XIA-01486] c01 N71-23497

WORTHMAN, J. J.
Semiconductor p-n junction stress and strain

- sensor
[NASA-CASE-XIA-(4980)] c09 N69-27422
Method of making semiconductor p-n junction
stress and strain sensor
[NASA-CASE-XIA-(4980-2)] c14 N72-28438
Particulate and aerosol detector
[NASA-CASE-LAR-11434-1] c35 N76-22509
- WRIGHT, D. B.
Method for measuring cutaneous sensory perception
[NASA-CASE-MSC-13609-1] c05 N72-25122
- WRIGHT, D. B.
Penetrating radiation system for detecting the
amount of liquid in a tank Patent
[NASA-CASE-MSC-12280] c27 N71-16348
- WRIGHT, L. B.
Vibrophonocardiograph Patent
[NASA-CASE-XFR-07172] c05 N71-27234
- WRIGHT, W. B.
Voltage regulator with plural parallel power
source sections Patent
[NASA-CASE-GSC-10891-1] c10 N71-26626
- WRINKLE, W. W.
Apparatus for remote handling of materials
[NASA-CASE-LAR-10634-1] c37 N74-18123
- WUBNSCHER, W. P.
Recoverable rocket vehicle Patent
[NASA-CASE-IMF-00389] c31 N70-34176
Serpentuator Patent
[NASA-CASE-XMF-05344] c31 N71-16345
Space manufacturing machine Patent
[NASA-CASE-MFS-20410] c15 N71-19214
Method of making foamed materials in zero gravity
[NASA-CASE-IMF-09902] c15 N72-11387
Hermetically sealed elbow actuator
[NASA-CASE-MFS-14710] c09 N72-22195
- WURKER, R. P.
Spatial filter for Q-switched lasers
[NASA-CASE-LFW-12164-1] c36 N77-32478
- WYBLE, C. W.
Thermal conductive connection and method of
making same Patent
[NASA-CASE-XMS-02087] c09 N70-41717
- WIDVEN, T. J., JR.
Protection of moisture sensitive optical
components
[NASA-CASE-ARC-10749-1] c23 N73-32542
Method of preparing water purification membranes
[NASA-CASE-ARC-10643-1] c25 N75-12087
Water purification process
[NASA-CASE-ARC-10643-2] c51 N75-13506
Preparation of dielectric coatings of variable
dielectric constant by plasma polymerization
[NASA-CASE-ARC-10892-2] c27 N77-17245
A reverse osmosis membrane of high urea
rejection properties
[NASA-CASE-ARC-10980-1] c27 N77-18265
Oxygen post-treatment of plastic surfaces coated
with plasma polymerized silicon-containing
monomers
[NASA-CASE-ARC-10915-2] c27 N77-20256
Abrasion resistant coatings for plastic surfaces
[NASA-CASE-ARC-10915-3] c24 N77-24200
Electric discharge for treatment of trace
contaminants
[NASA-CASE-ARC-10975-1] c54 N77-24771
Process for the preparation of calcium superoxide
[NASA-CASE-ARC-11053-1] c25 N77-29252
- WYLIE, G. B.
Sealed battery gas manifold construction Patent
[NASA-CASE-IMP-03378] c03 N71-11051
- WYNAN, C. L.
Acquisition and tracking system for optical radar
[NASA-CASE-MFS-20125] c16 N72-13437
Strain gauge ambiguity sensor for segmented
mirror active optical system
[NASA-CASE-MFS-20506-1] c35 N75-12273
System for the measurement of ultra-low stray
light levels
[NASA-CASE-MFS-23513-1] c74 N77-14842
- WYNNEEN, R. A.
Iodine generator for reclaimed water purification
[NASA-CASE-MSC-14632-1] c54 N75-25594
- WYSOCKI, J. J.
Radiation resistant silicon semiconductor
devices Patent
[NASA-CASE-XGS-07801] c09 N71-12513
- YAGER, S. P.
Piping arrangement through a double chamber
structure
[NASA-CASE-IMP-08882] c15 N69-39935
- YANG, L. C.
Optically actuated two position mechanical mover
[NASA-CASE-NFO-13105-1] c37 N74-21060
Optically detonated explosive device
[NASA-CASE-NFO-11743-1] c28 N74-27425
Compact pulsed laser having improved heat
conductance
[NASA-CASE-NFO-13147-1] c36 N77-25502
- YANG, P. H.
Fluid power transmitting gas bearing Patent
[NASA-CASE-BEC-10097] c15 N71-28465
- YASUI, R. K.
Solar cell submodule Patent
[NASA-CASE-IMP-05821] c03 N71-11056
Solar cell matrix Patent
[NASA-CASE-NFO-10821] c03 N71-19545
Solar cell matrix
[NASA-CASE-NFO-11190] c03 N71-34044
Stacked solar cell arrays
[NASA-CASE-NFC-11771] c03 N73-20040
Solar cell grid patterns
[NASA-CASE-NFO-13087-2] c44 N76-31666
A solar array strip and a method for forming the
same
[NASA-CASE-NFO-13652-1] c44 N77-28585
- YEAGER, P. B.
Gas analyzer for bi-gaseous mixtures Patent
[NASA-CASE-XIA-01131] c14 N71-10774
Thermopile vacuum gage tube simulator Patent
[NASA-CASE-XIA-02758] c14 N71-18481
Fast scan control for deflection type mass
spectrometers
[NASA-CASE-LAR-10766-1] c14 N72-21432
Fast scan control for deflection type mass
spectrometers
[NASA-CASE-LAR-11428-1] c35 N74-34857
- YEH, C.
Fiber distributed feedback laser
[NASA-CASE-NFO-13531-1] c36 N76-24553
- YIN, L. I.
Low intensity X-ray and gamma-ray imaging device
[NASA-CASE-GSC-12263-1] c35 N77-29471
- YOSHINO, S. Y.
Bonding or repairing process
[NASA-CASE-MSC-12357] c15 N73-12489
- YOST, V. H.
Apparatus for welding torch angle and seam
tracking control Patent
[NASA-CASE-IMP-03287] c15 N71-15607
- YOUNG, A. L.
Control valve and co-axial variable injector
Patent
[NASA-CASE-IMP-09702] c15 N71-17654
Semitoroidal diaphragm cavitating valve Patent
[NASA-CASE-IMP-09704] c12 N71-18615
- YOUNG, D. B.
Skeletal stressing method and apparatus Patent
[NASA-CASE-ARC-10100-1] c05 N71-24738
Programmable physiological infusion
[NASA-CASE-ARC-10447-1] c52 N74-22771
- YOUNG, R.
Radio frequency shielded enclosure Patent
[NASA-CASE-IMP-09422] c07 N71-19436
- YOUNG, L. B.
Display research collision warning system
[NASA-CASE-BQM-10703] c21 N73-13643
- YOUNG, R. W.
Ac power amplifier Patent Application
[NASA-CASE-LAR-10218-1] c09 N70-34559
Automatic balancing device Patent
[NASA-CASE-LAR-10774] c10 N71-13545
- YOUNG, W. J.
Phonocardiograph transducer Patent
[NASA-CASE-XMS-05365] c14 N71-22993
- YOUNGBLUTH, O., JR.
Method and apparatus for mapping the sensitivity
of the face of a photodetector specifically a
PMT
[NASA-CASE-LAR-10320-1] c09 N72-23172
- YU, I. P.
Dual frequency circularly polarized microwave
integrated antenna

Z

[NASA-CASE-MSC-16100-1] c32 N77-15233

ZABOWIE, B. B.
Hand-held photomicroscope
[NASA-CASE-AFC-10468-1] c14 N73-33361

ZABLAVA, B. A.
Vacuum probe surface sampler
[NASA-CASE-LAR-10623-1] c14 N73-30395

ZABENBA, J. G.
Passive caging mechanism Patent
[NASA-CASE-GSC-10306-1] c15 N71-24694

ZABETSKY, E. V.
Method of improving the reliability of a rolling
element system Patent
[NASA-CASE-XLE-02999] c15 N71-16052

ZAVATA, E. J.
Frangible tube energy dissipation Patent
[NASA-CASE-XLA-00754] c15 N70-34850

ZAVIANTSEFF, V.
Apparatus for ionization analysis
[NASA-CASE-ARC-10017-1] c14 N72-29464

ZBANAB, B. W.
Filtering device
[NASA-CASE-MFS-22729-1] c32 N76-21366

ZEBROWSKI, Z. E.
Attitude control system for sounding rockets
Patent
[NASA-CASE-IGS-01654] c31 N71-24750

ZEBUS, P. P.
Adjustable securing base
[NASA-CASE-MSC-15666-1] c37 N76-31529

ZEIGER, R. J.
Concentric differential gearing arrangement
[NASA-CASE-ARC-10462-1] c37 N74-27901

ZELLNER, G. J.
Gas cooled high temperature thermocouple Patent
[NASA-CASE-XLE-09475-1] c33 N71-15568

ZEMAN, J. E.
Lamp modulator
[NASA-CASE-KSC-10565] c09 N72-25250

ZERGEER, B. S.
Constant temperature heat sink for calorimeters
Patent
[NASA-CASE-XMF-04208] c33 N71-29051

ZERLAUT, G. A.
Stabilized zinc oxide coating compositions Patent
[NASA-CASE-XMF-07770-2] c18 N71-26772

Synthesis of zinc titanate pigment and coatings
containing the same
[NASA-CASE-MFS-13532] c18 N72-17532

ZIERKE, B. C.
Constant temperature heat sink for calorimeters
Patent
[NASA-CASE-XMF-04208] c33 N71-29051

ZIMMERMAN, B. G.
Sun tracker with rotatable plane-parallel plate
and two photocells Patent
[NASA-CASE-IGS-01159] c21 N71-10678

Gravity gradient attitude control system Patent
[NASA-CASE-GSC-10555-1] c21 N71-27324

Passive dual spin misalignment compensators
[NASA-CASE-GSC-11479-1] c35 N74-28097

ZIMMERMAN, B. F.
Apparatus for applying cover slides
[NASA-CASE-NFO-10575] c03 N72-25019

ZIMMERMAN, B. I.
Thermally operated valve Patent
[NASA-CASE-XLE-00815] c15 N70-35407

Double optic system for ion engine Patent
[NASA-CASE-XNP-02839] c28 N70-41922

ZIOLKOWSKI, A. J.
Multi-lobe scan horizon sensor Patent
[NASA-CASE-XGS-00809] c21 N70-35427

ZLATKIS, A.
Analysis of volatile organic compounds
[NASA-CASE-MSC-14428-1] c23 N77-17161

ZNUDA, L. J.
Safety-type locking pin
[NASA-CASE-MFS-18495] c15 N72-11385

ZNUDEHNAS, J. S.
Stabilization of He2(a-3 Sigma(+)) molecules in
liquid helium by optical pumping for vacuum UV
laser
[NASA-CASE-NFO-13993-1] c36 N77-24468

ZONAB, S.
Counting digital filters
[NASA-CASE-NFO-11821-1] c08 N73-26175

ZOOK, H. A.
Meteoroid capture cell construction
[NASA-CASE-MSC-12423-1] c91 N76-30131

ZORUNSKI, W. E.
Remote controlled tubular disconnect Patent
[NASA-CASE-XLA-01396] c03 N71-12259

Noise suppressor
[NASA-CASE-LAR-11141-1] c07 N74-32418

ZOTTARELLI, L. J.
Magnetic core current steering commutator Patent
[NASA-CASE-NFO-10201] c08 N71-18694

Drive circuit utilizing two cores Patent
[NASA-CASE-XNP-01318] c10 N71-23033

Current steering switch Patent
[NASA-CASE-XNP-08567] c09 N71-26000

Digital memory in which the driving of each word
location is controlled by a switch core Patent
[NASA-CASE-XNP-01466] c10 N71-26434

ZROBEK, W. E.
System for monitoring signal amplitude ranges
[NASA-CASE-XMS-04061-1] c09 N69-39885

ZUCCARO, J. J.
Electrode construction Patent
[NASA-CASE-AEC-10043-1] c05 N71-11193

ZUCKERMAN, A. J.
Instrumentation for measurement of aircraft
noise and sonic boom
[NASA-CASE-LAR-11173-1] c35 N75-19614

Instrumentation for measuring aircraft noise and
sonic boom
[NASA-CASE-LAR-11476-1] c07 N76-27232

Differential sound level meter
[NASA-CASE-LAR-12106-1] c35 N77-23441

ZURASKY, J. L.
Monitoring deposition of films
[NASA-CASE-MFS-20675] c26 N73-26751

ZWIEBER, J. H.
Real time reflectometer
[NASA-CASE-MFS-23118-1] c35 N77-31465

ZYGIELBAUM, A. I.
Communications link for computers
[NASA-CASE-NFO-11161] c08 N72-25207

Digital video display system using cathode ray
tube
[NASA-CASE-NFO-11342] c09 N72-25248

Numerical computer peripheral interactive device
with manual controls
[NASA-CASE-NFO-11497] c08 N73-25206

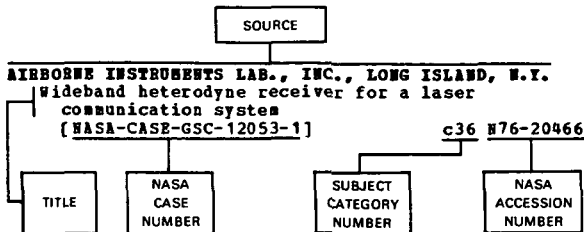
Digital demodulator-correlator
[NASA-CASE-NFO-13982-1] c32 N77-24341

NASA PATENT ABSTRACTS BIBLIOGRAPHY

JANUARY 1978

Section 2

Typical Source Index Listing



Listings in this index are arranged alphabetically by source. The title of the document provides the user with a brief description of the subject matter. The NASA Case Number is the prime access point to patent documents. The subject category number indicates the category in Section 1 (Abstracts) in which the citation is located. The NASA accession number denotes the number by which the citation is identified within the subject category. The titles are arranged under each source in ascending accession number order.

A

ACCESSORY PRODUCTS CO., WHITTIER, CALIF.
Rubber composition for use with hydrazine Patent Application
[NASA-CASE-WFO-11433] c18 N71-31140

AEROFLEX LABS., INC., PLAINVIEW, N. Y.
Rotary actuator
[NASA-CASE-WFO-10244] c15 N72-26371

AEROJET-GENERAL CORP., EL MONTE, CALIF.
High-speed infrared furnace
[NASA-CASE-ILE-10466] c17 N69-25147

Ammonium perchlorate composite propellant containing an organic transitional metal chelate catalytic additive Patent
[NASA-CASE-LAR-10173-1] c27 N71-14090

Swirling flow nozzle Patent
[NASA-CASE-INE-03692] c28 N71-24321

Automatic battery charger Patent
[NASA-CASE-INE-04758] c03 N71-24605

Attitude control system for sounding rockets Patent
[NASA-CASE-IGS-01654] c31 N71-24750

Tensile strength testing device Patent
[NASA-CASE-INE-05634] c15 N71-24834

Hydroforming techniques using epoxy molds Patent
[NASA-CASE-ILE-05641-1] c15 N71-26346

Electrical apparatus for detection of thermal decomposition of insulation Patent
[NASA-CASE-INE-03968] c14 N71-27186

Method and apparatus for nondestructive testing of pressure vessels
[NASA-CASE-WFO-12142-1] c38 N76-28563

AEROJET-GENERAL CORP., GLENDALE, CALIF.
Rotating shaft seal Patent
[NASA-CASE-INE-02862-1] c15 N71-26294

AEROJET-GENERAL CORP., SACRAMENTO, CALIF.
Process of forming particles in a cryogenic path Patent
[NASA-CASE-WFO-10250] c23 N71-16212

AERONAUTICAL RESEARCH ASSOCIATES OF PRINCETON, INC., N. J.
Integrated lift/drag controller for aircraft
[NASA-CASE-ARC-10456-1] c05 N75-12930

AIRBORNE INSTRUMENTS LAB., DEER PARK, N. Y.
High-Q bandpass resonators utilizing bandstop resonator pairs
[NASA-CASE-GSC-10990-1] c09 N73-26195

AIRTRONICS, INC., WASHINGTON, D.C.
Protection for energy conversion systems
[NASA-CASE-IGS-04808] c03 N69-25146

Inverter with means for base current shaping for sweeping charge carriers from base region Patent

[NASA-CASE-IGS-06226] c10 N71-25950

AMERICAN AIR FILTER CO., INC., ST. LOUIS, MO.
Gas filter mounting structure
[NASA-CASE-MSC-12297] c14 N72-23457

AMERICAN OPTICAL CO., PITTSBURGH, PA.
Telespectrograph Patent
[NASA-CASE-ILA-03273] c14 N71-18699

AMERICAN OPTICAL CO., SOUTHBRIDGE, MASS.
Pneumatic mirror support system
[NASA-CASE-ILA-03271] c11 N69-24321

AMERICAN SCIENCE AND ENGINEERING, INC., CAMBRIDGE, MASS.
X-ray reflection collimator adapted to focus X-radiation directly on a detector Patent
[NASA-CASE-IGH-04106] c14 N70-40240

AMPPI CORP., BEDWOOD CITY, CALIF.
Method for making conductors for ferrite memory arrays
[NASA-CASE-LAR-10994-1] c24 N75-13032

APPLIED MAGNETICS CORP., GOLETA, CALIF.
Magnetic recording head and method of making same Patent
[NASA-CASE-GSC-10097-1] c08 N71-27210

APPLIED PHYSICS LAB., JOHNS HOPKINS UNIV., LAUREL, MD.
Open loop digital frequency multiplier
[NASA-CASE-MSC-12709-1] c33 N77-24375

APPLIED PHYSICS LAB., JOHNS HOPKINS UNIV., SILVER SPRING, MD.
Telemetry synchronizer
[NASA-CASE-GSC-11868-1] c17 N76-22245

APPLIED SPACE PRODUCTS, INC., PALO ALTO, CALIF.
Intumescent paints Patent
[NASA-CASE-ARC-10099-1] c18 N71-15469

ARMY AIR MOBILITY RESEARCH AND DEVELOPMENT LAB., HOFFETT FIELD, CALIF.
Acoustically swept rotor
[NASA-CASE-ARC-11106-1] c05 N77-31130

ASTRO-SPACE LABS., INC., HUNTSVILLE, ALA.
Linear differential pressure sensor Patent
[NASA-CASE-INE-01974] c14 N71-22752

ATLANTIC RESEARCH CORP., ALEXANDRIA, VA.
Spherically-shaped rocket motor Patent
[NASA-CASE-IGH-01897] c28 N70-35381

AUBURN RESEARCH FOUNDATION, INC., ALA.
Shear modulated fluid amplifier Patent
[NASA-CASE-MFS-10412] c12 N71-17578

Laser coolant and ultraviolet filter
[NASA-CASE-MFS-20180] c16 N72-12440

AUBURN UNIV., ALA.
Automatic frequency control for FM transmitter
[NASA-CASE-MFS-21540-1] c32 N74-19790

Isolated output system for a class D switching-mode amplifier
[NASA-CASE-MFS-21616-1] c33 N75-30429

Frequency modulated oscillator
[NASA-CASE-MFS-23181-1] c33 N77-17351

AUTONETICS, ANAHEIM, CALIF.
Adaptive voting computer system
[NASA-CASE-MSC-13932-1] c62 N74-14920

AVCO CORP., NEW YORK.
Signal multiplexer
[NASA-CASE-IGS-01110] c07 N69-24334

AVCO CORP., WILMINGTON, MASS.
Method and apparatus for making a heat insulating and ablative structure Patent
[NASA-CASE-IMS-02009] c33 N71-20834

B

BALDWIN ELECTRONICS, INC., LITTLE ROCK, ARK.
Digital plus analog output encoder
[NASA-CASE-GSC-12115-1] c62 N76-31546

BALDWIN-LIMA-HAMILTON CORP., SAN FRANCISCO, CALIF.
Valve actuator Patent

[NASA-CASE-XHC-01208]	c15 N70-35409	BELL AND HOWELL CO., CHICAGO, ILL.	
BALL BROS. RESEARCH CORP., BOULDER, COLO.		Boron trifluoride coatings for thermoplastic materials	
Turnstile slot antenna		[NASA-CASE-ARC-11057-1]	c27 N77-26308
[NASA-CASE-GSC-11428-1]	c32 N74-20864	BELLCOMM, INC., WASHINGTON, D. C.	
Star scanner		Physical correction filter for improving the optical quality of an image	
[NASA-CASE-GSC-11569-1]	c89 N74-30886	[NASA-CASE-BQN-10542-1]	c74 N75-25706
BARNES ENGINEERING CO., STAMFORD, CTNN.		BENDIX CORP., ANN ARBOR, MICH.	
Multi-lobar scan horizon sensor Patent		Circuit breaker utilizing magnetic latching relays Patent	
[NASA-CASE-IGS-00809]	c21 N70-35427	[NASA-CASE-MSC-11277]	c09 N71-29008
Horizon sensor with a plurality of fixedly positioned radiation compensated radiation sensitive detectors Patent		BENDIX CORP., DAVENPORT, IOWA.	
[NASA-CASE-XNP-06957]	c14 N71-21088	Dual stage check valve	
Miniature carbon dioxide sensor and methods		[NASA-CASE-MSC-13587-1]	c15 N73-30459
[NASA-CASE-MSC-13332-1]	c14 N72-21408	BENDIX CORP., DETROIT, MICH.	
BATTELLE MEMORIAL INST., COLUMBUS, OHIO.		Deformable vehicle wheel Patent	
Process for preparation of dianilinosilanes Patent		[NASA-CASE-MFS-20400]	c31 N71-18611
[NASA-CASE-XMF-06409]	c06 N71-23230	BENDIX CORP., HUNTSVILLE, ALA.	
Process for preparation of high-molecular-weight polyaryloxysilanes Patent		Multi axes vibration fixtures	
[NASA-CASE-XMF-08674]	c06 N71-28807	[NASA-CASE-MFS-20242]	c14 N73-19421
Method for determining presence of OH in magnesium oxide		BENDIX CORP., KENNEDY SPACE CENTER, FLA.	
[NASA-CASE-WFO-10774]	c06 N72-17095	Color perception tester	
Porus electrode comprising a bonded stack of pieces of corrugated metal foil		[NASA-CASE-KSC-10278]	c05 N72-16015
[NASA-CASE-GSC-11368-1]	c09 N73-32108	BENDIX CORP., TETERBORO, N. J.	
Method of making porous conductive supports for electrodes		Evacuation valve	
[NASA-CASE-GSC-11367-1]	c44 N74-19692	[NASA-CASE-LAR-10061-1]	c15 N72-31483
BATTELLE MEMORIAL INST., RICHLAND, WASH.		BENDIX RESEARCH LABS., SOUTHFIELD, MICH.	
Low temperature aluminum alloy Patent		Image tube	
[NASA-CASE-XMF-02786]	c17 N71-20743	[NASA-CASE-GSC-11602-1]	c33 N74-21850
BATTELLE-NORTHWEST, RICHLAND, WASH.		BOEING CO., COCOA BEACH, FLA.	
Preparation of high purity copper fluoride		Positive contact resistance soldering unit	
[NASA-CASE-LEW-10794-1]	c06 N72-17093	[NASA-CASE-KSC-10242]	c15 N72-23497
FAUSCH AND LOEB, INC., ROCHESTER, N. Y.		Variable resistance constant tension and lubrication device	
Petzval type objective including field shaping lens Patent		[NASA-CASE-KSC-10723-1]	c37 N75-13265
[NASA-CASE-GSC-10700]	c23 N71-30027	BOEING CO., HUNTSVILLE, ALA.	
Illumination system including a virtual light source Patent		Hydrogen fire blink detector	
[NASA-CASE-BGN-10781]	c23 N71-30292	[NASA-CASE-MFS-15063]	c14 N72-25412
BAYLOR UNIV., HOUSTON, TEX.		Borescope with variable angle scope	
EEG sleep analyzer and method of operation Patent		[NASA-CASE-MFS-15162]	c14 N72-32452
[NASA-CASE-MSC-13282-1]	c05 N71-24729	Guide for a typewriter	
Compressible biomedical electrode		[NASA-CASE-MFS-15218-1]	c37 N77-19457
[NASA-CASE-MSC-13648]	c05 N72-27103	BOEING CO., PASADENA, TEX.	
BECKMAN INSTRUMENTS, INC., ANAHEIM, CALIF.		Medical subject monitoring systems	
Pressure modulating valve		[NASA-CASE-MSC-14180-1]	c52 N76-14757
[NASA-CASE-MSC-149C5-1]	c37 N77-28487	BOEING CO., SEATTLE, WASH.	
BECKMAN INSTRUMENTS, INC., FULLERTON, CALIF.		Method of inhibiting stress corrosion cracks in titanium alloys Patent	
Pulse activated polarographic hydrogen detector Patent		[NASA-CASE-WFO-10271]	c17 N71-16393
[NASA-CASE-XMF-06531]	c14 N71-17575	Strain sensor for high temperatures Patent	
Electronic divider and multiplier using photocells Patent		[NASA-CASE-XNP-09205]	c14 N71-17657
[NASA-CASE-XPR-05637]	c09 N71-19480	Forming tool for ribbon or wire	
Pulse generating circuit employing switch means on ends of delay line for alternately charging and discharging same Patent		[NASA-CASE-XIA-05966]	c15 N72-12408
[NASA-CASE-XNP-00745]	c10 N71-28960	Solar cell assembly test method	
Gas operated actuator		[NASA-CASE-WFO-10401]	c03 N72-20033
[NASA-CASE-WFO-11340]	c15 N72-33477	Thermal compression bonding of interconnectors	
Specific wavelength colorimeter		[NASA-CASE-GSC-10303]	c15 N72-22487
[NASA-CASE-MSC-14081-1]	c35 N74-27860	Extrusion can	
BECKMAN INSTRUMENTS, INC., SOUTH PASADENA, CALIF.		[NASA-CASE-WFO-10812]	c15 N73-13464
Pneumatic system for controlling and actuating pneumatic cyclic devices		Radiation sensitive solid state switch	
[NASA-CASE-XNS-04843]	c03 N69-21469	[NASA-CASE-WFO-10817-1]	c08 N73-30135
BECTON, DICKINSON AND CO., RUTHERFORD, N. J.		Miniature hydraulic actuator	
Vacuum probe surface sampler		[NASA-CASE-LAR-11522-1]	c34 N74-34881
[NASA-CASE-LAR-10623-1]	c14 N73-30395	Plasma cleaning device	
BELL AEROSPACE CO., BUFFALO, N. Y.		[NASA-CASE-MFS-22906-1]	c75 N76-24001
Modulator for time and binary signals		Aircraft design concept	
[NASA-CASE-GSC-11743-1]	c32 N75-24981	[NASA-CASE-LAR-11852-1]	c05 N77-15027
Correlation type phase detector		BORG-WARNER CORP., CHICAGO, ILL.	
[NASA-CASE-GSC-11744-1]	c33 N75-26243	Data transfer system Patent	
BELL AEROSYSTEMS CO., BUFFALO, N. Y.		[NASA-CASE-WFO-12107]	c08 N71-27255
Lunar landing flight research vehicle Patent		BROWN AND ROOT-NORTHEROP, HOUSTON, TEX.	
[NASA-CASE-XPR-00929]	c31 N70-34966	Anti-fog composition	
Flexibly connected support and skin Patent		[NASA-CASE-MSC-13530-2]	c23 N75-14834
[NASA-CASE-XIA-01027]	c31 N71-24035	BROWN ENGINEERING CO., INC., HUNTSVILLE, ALA.	
Injection head for delivering liquid fuel and oxidizers		Air bearing Patent	
[NASA-CASE-WFC-10046]	c28 N72-17843	[NASA-CASE-XNP-01887]	c15 N71-10617
Flight control system		Collapsible nozzle extension for rocket engines Patent	
[NASA-CASE-MSC-13397-1]	c21 N72-25595	[NASA-CASE-MFS-11497]	c28 N71-16224
		Inspection gage for boss Patent	
		[NASA-CASE-XNP-04966]	c14 N71-17658
		Method of recording a gas flow pattern Patent	
		[NASA-CASE-XNP-01779]	c12 N71-20815
		Trigonometric vehicle guidance assembly which aligns the three perpendicular axes of two three-axes systems Patent	
		[NASA-CASE-XNP-00684]	c21 N71-21688

Vapor liquid separator Patent
[NASA-CASE-XMP-04042] c15 N71-23023
Thruster maintenance system Patent
[NASA-CASE-MFS-20325] c28 N71-27095
Inflatable transpiration cooled nozzle
[NASA-CASE-MFS-20619] c28 N72-11708

C

CALIFORNIA COMPUTER PRODUCTS, INC., ANAHEIM.
Temperature regulation circuit Patent
[NASA-CASE-XMP-02792] c14 N71-28958
CALIFORNIA INST. OF TECH., PASADENA.
Attitude control for spacecraft Patent
[NASA-CASE-XMP-02982] c31 N70-41855
CALIFORNIA UNIV., BERKELEY.
Adjustable mount for a trihedral mirror Patent
[NASA-CASE-XMP-08907] c23 N71-29123
Infrared detectors
[NASA-CASE-LAR-10728-1] c14 N73-12445
Low gravity phase separator
[NASA-CASE-HSC-14773-1] c31 N75-32262
Resistive anode image converter
[NASA-CASE-HCN-10876-1] c33 N76-27473
Automatic multiple-sample applicator and
electrophoresis apparatus
[NASA-CASE-AEC-10991-1] c25 N77-12157
Process for preparing higher oxides of the
alkali and alkaline earth metals
[NASA-CASE-AEC-10992-1] c25 N77-17178
CALIFORNIA UNIV., LOS ANGELES.
Continuous plasma light source
[NASA-CASE-XMP-04167-2] c25 N72-24753
Continuous plasma laser
[NASA-CASE-XMP-04167-3] c36 N77-19416
CARBORUNDUM CO., NIAGARA FALLS, N. Y.
Ceramic filter insulating material and methods of
producing same
[NASA-CASE-HSC-14795-1] c27 N76-15314
CATHOLIC UNIV. OF AMERICA, WASHINGTON, D. C.
Electromagnetic wave energy converter
[NASA-CASE-GSC-11394-1] c09 N73-32109
CHANCE VOUGHT CORP., DALLAS, TEX.
Coupling for linear shaped charge Patent
[NASA-CASE-XLA-00189] c23 N70-36846
Spin forming tubular elbows Patent
[NASA-CASE-XMF-01083] c15 N71-22723
Single action separation mechanism Patent
[NASA-CASE-XLA-00188] c15 N71-22874
CHEMCOIL CORP., BAKERSFIELD, CALIF.
Process for removing sulfur dioxide from gas
streams
[NASA-CASE-HSC-16299-1] c45 N77-31668
CHRYSLER CORP., DETROIT, MICH.
Ceramic insulation for radiant heating
environments and method of preparing the same
Patent
[NASA-CASE-MFS-14253] c33 N71-24858
Constant temperature heat sink for calorimeters
Patent
[NASA-CASE-XMF-04208] c33 N71-29051
CHRYSLER CORP., HUNTSVILLE, ALA.
Apparatus for ejection of an instrument cover
[NASA-CASE-XMF-04132] c15 N69-27502
COLLINS RADIO CO., CEDAR RAPIDS, IOWA.
Power responsive overload sensing circuit Patent
[NASA-CASE-GSC-10667-1] c10 N71-33129
COLLINS RADIO CO., DALLAS, TEX.
Signal path series step biased multidevice high
efficiency amplifier Patent
[NASA-CASE-GSC-10668-1] c07 N71-28430
Heat conductive resiliently compressible
structure for space electronics package
modules Patent
[NASA-CASE-HSC-12389] c33 N71-29052
Infinite range electronics gain control circuit
[NASA-CASE-GSC-10786-1] c10 N72-28241
COLORADO STATE UNIV., FORT COLLINS.
Extraction and separation of a preferentially
photo-dissociated molecular isotope into
positive and negative ions by means of an
electric field
[NASA-CASE-LFW-12465-1] c72 N76-27967
COMPREHENSIVE DESIGNERS, INC., SHEPPARD OAKS, CALIF.
Vehicle for use in planetary exploration
[NASA-CASE-NFO-11366] c11 N73-26238
COMPUTER CONTROL CO., INC., FRANKINGHAM, MASS.
Test fixture for pellet-like electrical elements
[NASA-CASE-XMP-06032] c09 N69-21926

Support structure for irradiated elements Patent
[NASA-CASE-XMP-06031] c15 N71-15606
Counter Patent
[NASA-CASE-XMP-06234] c10 N71-27137
CONRAC CORP., PASADENA, CALIF.
Penetrating radiation system for detecting the
amount of liquid in a tank Patent
[NASA-CASE-HSC-12280] c27 N71-16348
COOPER UNION, HOUSTON, TEX.
Pyrolysis system and process
[NASA-CASE-HSC-12669-1] c44 N76-16621
CORNELL UNIV., ITHACA, N. Y.
Flux sensing device using a tubular core with
toroidal gating coil and solenoidal output
coil wound thereon Patent
[NASA-CASE-IGS-01881] c09 N70-40123
CRANE CO., BURBANK, CALIF.
Hydraulic transformer Patent
[NASA-CASE-MFS-20830] c15 N71-30028
CURTISS-WRIGHT CORP., WOOD-BIDGE, N.J.
Gas turbine combustion apparatus Patent
[NASA-CASE-XLE-103477-1] c28 N71-20330
CUTLER-HAMMER, INC., MELVILLE, N.Y.
Wideband heterodyne receiver for laser
communication system
[NASA-CASE-GSC-12053-1] c32 N77-28346

D

DELAWARE UNIV., NEWARK.
High field CdS detector for infrared radiation
[NASA-CASE-LAR-11027-1] c35 N74-18088
DENVER UNIV., COLO.
Metal shearing energy absorber
[NASA-CASE-HCN-10638-1] c15 N73-30460
DEPARTMENT OF TRANSPORTATION, CAMBRIDGE, MASS.
Optical noise suppression device and method
[NASA-CASE-HSC-12640-1] c74 N76-31998
DORNE AND HARGOLIN, INC., BOHEMIA, N.Y.
Nose cone mounted heat resistant antenna Patent
[NASA-CASE-XMS-04312] c07 N71-22984
DOUGLAS AIRCRAFT CO., INC., SANTA MONICA, CALIF.
Recoverable single stage spacecraft booster Patent
[NASA-CASE-XMF-01973] c31 N70-41588
Switching circuit employing regeneratively
connected complementary transistors Patent
[NASA-CASE-XMF-02654] c10 N70-42032
Split nut separation system Patent
[NASA-CASE-XMP-06914] c15 N71-21489
Artificial gravity spin deployment system Patent
[NASA-CASE-XMF-02595] c31 N71-21881
Portable superclean air column device Patent
[NASA-CASE-XMF-03212] c15 N71-22721
Energy absorption device Patent
[NASA-CASE-XMF-01848] c15 N71-28959
Collapsible pistons
[NASA-CASE-HSC-13789-1] c11 N73-32152
DUKE UNIV., DURHAM, N. C.
Regulated dc-to-dc converter for voltage step-up
or step-down with input-output isolation
[NASA-CASE-HCN-10792-1] c33 N74-11049

E

EITEL-HCCULLOUGH, INC., SAN CARLOS, CALIF.
Method of forming ceramic to metal seal Patent
[NASA-CASE-XMP-01263-2] c15 N71-26312
ELECTRAC, INC., ANAHEIM, CALIF.
Optimum predetection diversity receiving system
Patent
[NASA-CASE-IGS-00740] c07 N71-23098
ELECTRIC STORAGE BATTERY CO., BALDWIN, N.C.
Electric battery and method for operating same
Patent
[NASA-CASE-IGS-01674] c03 N71-29129
ELECTRO-OPTICAL SYSTEMS, INC., PASADENA, CALIF.
Focusing system for an ion source having
apertured electrodes Patent
[NASA-CASE-XMP-03332] c09 N71-10618
Electrolytically regenerative hydrogen-oxygen
fuel cell Patent
[NASA-CASE-XLE-04526] c03 N71-11052
Method of producing refractory bodies having
controlled porosity Patent
[NASA-CASE-LFW-10393-1] c17 N71-15468
Soil particles separator, collector and viewer
Patent
[NASA-CASE-XMF-09770] c15 N71-20440

Particle detection apparatus including a
ballistic pendulum Patent
[NASA-CASE-XMS-04201] c14 N71-22990
Polarity sensitive circuit Patent
[NASA-CASE-XNP-00952] c10 N71-23271
Ion engine casing construction and method of
making same Patent
[NASA-CASE-XNP-06942] c28 N71-23293
Material handling device Patent
[NASA-CASE-XNP-05770-3] c11 N71-27036
Screen particle separator
[NASA-CASE-XNP-09770-2] c15 N72-22483
ELECTRONIC IMAGE SYSTEMS CORP., CAMBRIDGE, MASS.
Drying apparatus for photographic sheet material
[NASA-CASE-GSC-11074-1] c14 N73-28489
ESB, INC., BALEIGH, N. C.
Storage battery comprising negative plates of a
wedge shaped configuration
[NASA-CASE-WFO-11806-1] c44 N74-19693
ESB, INC., YARDLEY, PA.
Electric storage battery
[NASA-CASE-WFO-11021] c03 N72-20032
EWEN KNIGHT CORP., EAST NATICK, MASS.
Method and means for providing an absolute power
measurement capability Patent
[NASA-CASE-FEC-11020] c14 N71-26774

F

FAIRCHILD HILLER CORP., GERMANTOWN, MD.
Two axis fluxgate magnetometer Patent
[NASA-CASE-GSC-10441-1] c14 N71-27325
Space simulation and radiative property testing
system and method Patent
[NASA-CASE-MFS-20096] c14 N71-30026
Thermal control system for a spacecraft modular
housing
[NASA-CASE-GSC-11018-1] c31 N73-30829
FARADAY LABS., INC., LA JOLIA, CALIF.
Method for attaching a fused-quartz mirror to a
conductive metal substrate
[NASA-CASE-MFS-23405-1] c26 N77-29260
FEDERAL-ROGUL CORP., LOS ALAMITOS, CALIF.
Hydraulic casting of liquid polymers Patent
[NASA-CASE-XNP-07659] c06 N71-22975
FLORIDA UNIV., GAINESVILLE.
Nonequilibrium radiation nuclear reactor
[NASA-CASE-BQN-10841-1] c73 N75-22108
Safety flywheel
[NASA-CASE-BQN-10888-1] c37 N77-22484
FMC CORP., NEW YORK.
Decomposition unit Patent
[NASA-CASE-XMS-00583] c28 N70-38504
FOOTHILL COLLEGE, LOS ALTOS HILLS, CALIF.
Electrical conductivity cell and method for
fabricating the same
[NASA-CASE-ABC-10810-1] c33 N76-19339
FORD MOTOR CO., DIARBORN, MICH.
Omnidirectional acceleration device Patent
[NASA-CASE-BQN-10780] c14 N71-30265

G

GARRETT CORP., LOS ANGELES, CALIF.
Relief valve
[NASA-CASE-XMS-05894-1] c15 N69-21924
Portable environmental control system Patent
[NASA-CASE-XMS-09632-1] c05 N71-11203
Dual latching solenoid valve Patent
[NASA-CASE-XMS-C5890] c09 N71-23191
Water management system and an electrolytic cell
therefor Patent
[NASA-CASE-HSC-10960-1] c03 N71-24718
Low cycle fatigue testing machine
[NASA-CASE-LAR-10270-1] c32 N72-25877
Process for separation of dissolved hydrogen
from water by use of palladium and process for
coating palladium with palladium black
[NASA-CASE-HSC-13335-1] c06 N72-31140
Flexible joint for pressurizable garment
[NASA-CASE-HSC-11072] c54 N74-32546
Gas compression analysis
[NASA-CASE-HSC-14757-1] c37 N76-13496
GCA CORP., BEDFORD, MASS.
Analytical photoionization mass spectrometer
with an argon gas filter between the light
source and monochromator Patent
[NASA-CASE-LAR-10180-1] c06 N71-13461

GENERAL DYNAMICS/ASTRONAUTICS, SAN DIEGO, CALIF.
Determination of spot weld quality Patent
[NASA-CASE-XNF-02588] c15 N71-18613
Pressure transducer calibrator Patent
[NASA-CASE-XNP-01660] c14 N71-23036
Plating nickel on aluminum castings Patent
[NASA-CASE-XNP-04148] c17 N71-24830
GENERAL DYNAMICS/CONVAIR, SAN DIEGO, CALIF.
Signal generator
[NASA-CASE-XNP-05612] c09 N69-21468
Separation nut Patent
[NASA-CASE-XGS-01971] c15 N71-15922
Zero gravity separator Patent
[NASA-CASE-XLE-00586] c15 N71-15968
Catalyst cartridge for carbon dioxide reduction
unit
[NASA-CASE-LAR-10551-1] c25 N74-12813
Heat exchanger
[NASA-CASE-MFS-22991-1] c34 N77-10463
GENERAL DYNAMICS CORP., SAN DIEGO, CALIF.
Light radiation direction indicator with a
baffle of two parallel grids
[NASA-CASE-XNF-03930] c14 N69-24331
Method and apparatus for attaching physiological
monitoring electrodes Patent
[NASA-CASE-XFR-07658-1] c05 N71-26293
Driving lamps by induction
[NASA-CASE-MFS-21214-1] c09 N73-30181
GENERAL ELECTRIC CO., CINCINNATI, OHIO.
Dual output variable pitch turbofan actuation
system
[NASA-CASE-LEW-12419-1] c07 N77-14025
Reverse pitch fan with divided splitter
[NASA-CASE-LEW-12760-1] c07 N77-17059
Leading edge protection for composite blades
[NASA-CASE-LEW-12550-1] c24 N77-19170
Oil cooling system for a gas turbine engine
[NASA-CASE-LEW-12830-1] c07 N77-23106
Blade retainer assembly
[NASA-CASE-LEW-12608-1] c07 N77-27116
Platform for a swing root turbomachinery blade
[NASA-CASE-LEW-12312-1] c07 N77-32148
Deformable bearing seat
[NASA-CASE-LEW-12527-1] c37 N77-32500
Bearing seat usable in a gas turbine engine
[NASA-CASE-LEW-12477-1] c37 N77-32501
GENERAL ELECTRIC CO., PHILADELPHIA, PA.
Catalyst for growth of boron carbide single
crystal whiskers
[NASA-CASE-XRG-03903] c15 N69-21922
Didymium hydrate additive to nickel hydroxide
electrodes Patent
[NASA-CASE-XGS-03505] c03 N71-10608
Bismuth-lead coatings for gas bearings used in
atmospheric environments and vacuum chambers
Patent
[NASA-CASE-XGS-02011] c15 N71-20739
Automatic control of liquid cooling garment by
cutaneous and external auditory meatus
temperatures
[NASA-CASE-HSC-13917-1] c05 N72-15098
Method for measuring cutaneous sensory perception
[NASA-CASE-HSC-13609-1] c05 N72-25122
Reaction tester
[NASA-CASE-HSC-13604-1] c05 N72-13114
Air conditioned suit
[NASA-CASE-LAR-10076-1] c05 N73-20137
Compton scatter attenuation gamma ray spectrometer
[NASA-CASE-MFS-21441-1] c14 N73-30392
Inverter ratio failure detector
[NASA-CASE-WFO-13160-1] c35 N74-18090
Electrophoretic sample insertion
[NASA-CASE-MFS-21395-1] c25 N74-26948
Apparatus for conducting flow electrophoresis in
the substantial absence of gravity
[NASA-CASE-MFS-21394-1] c34 N74-27744
Multiparameter vision testing apparatus
[NASA-CASE-HSC-13601-2] c54 N75-27759
Automatic blowaste sampling
[NASA-CASE-HSC-14640-1] c54 N76-14804
GENERAL ELECTRIC CO., ELHASANTON, CALIF.
Method of making a cermet Patent
[NASA-CASE-LEW-10219-1] c18 N71-28729
GENERAL ELECTRIC CO., SCHENECTADY, N. Y.
Superconductive accelerometer Patent
[NASA-CASE-XNP-01099] c14 N71-15969

Remote manipulator system
[NASA-CASE-HFS-22022-1] c37 H76-15460

Automatic transponder
[NASA-CASE-GSC-12075-1] c32 H77-31350

Directionally solidified eutectic gamma plus
beta nickel-base superalloys
[NASA-CASE-LFW-12906-1] c26 H77-32279

GENERAL ELECTRIC CO., UTICA, N. Y.
• Method of determining bond quality of power
transistors attached to substrates
[NASA-CASE-HFS-21931-1] c37 H75-26372

GENERAL MOTORS CORP., DETROIT, MICH.
Hermetic sealed vibration damper Patent
[NASA-CASE-HSC-10959] c15 H71-26243

GENERAL MOTORS CORP., MILWAUKEE, WIS.
Adjustable tension wire guide Patent
[NASA-CASE-HMS-02383] c15 H71-15918

GENERAL MOTORS CORP., SANTA BARBARA, CALIF.
Resilient wheel Patent
[NASA-CASE-HFS-13929] c15 H71-27091

GENERAL PRECISION, INC., LITTLE FALLS, N.J.
Reversible current control apparatus Patent
[NASA-CASE-ILA-09371] c10 H71-18724

GENERAL PRECISION, INC., SUMMIT VALLEY, CALIF.
Broadband video process with very high input
impedance
[NASA-CASE-HFO-10195] c09 H72-17156

GENERAL PRECISION SYSTEMS, INC., LITTLE FALLS, N.J.
Fluidic-thermochromic display device Patent
[NASA-CASE-PHC-10031] c12 H71-18603

GENERAL TECHNOLOGIES CORP., BOSTON, VA.
Method of making reinforced composite structure
[NASA-CASE-LFW-12619-1] c24 H77-19171

GEOPHYSICS CORP. OF AMERICA, BEDFORD, MASS.
Inflation system for balloon type satellites
Patent
[NASA-CASE-IGS-03351] c31 H71-16081

GEOPHYSICS CORP. OF AMERICA, BOSTON, MASS.
Ionospheric battery Patent
[NASA-CASE-IGS-01593] c03 H70-35408

GEORGE WASHINGTON UNIV., WASHINGTON, D. C.
Bacteria detection instrument and method
[NASA-CASE-GSC-11533-1] c14 H73-13435

Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] c52 H74-27566

GIANNINI SCIENTIFIC CORP., SANTA ANA, CALIF.
Electric arc light source having undercut
recessed anode
[NASA-CASE-ABC-10266-1] c33 H75-29318

Combination automatic-starting electrical plasma
torch and gas shutoff valve
[NASA-CASE-IEE-10717] c37 H75-29426

GLOBE-UNION, INC., MILWAUKEE, WIS.
Method of coating solar cell with borosilicate
glass and resultant product
[NASA-CASE-GSC-11514-1] c03 H72-24037

GOODYEAR AEROSPACE CORP., ARENCO, OHIO.
Foldable solar concentrator Patent
[NASA-CASE-ILA-04622] c03 H70-41580

Method of making a filament-wound container Patent
[NASA-CASE-ILE-03803-2] c15 H71-17651

Filament wound container Patent
[NASA-CASE-ILE-03803] c15 H71-23816

Panelized high performance multilayer insulation
Patent
[NASA-CASE-HFS-14023] c33 H71-25351

Thermally activated fusing compositions Patent
[NASA-CASE-LAR-10373-1] c18 H71-26155

Compression test assembly
[NASA-CASE-LAR-10440-1] c14 H73-32323

Deployable flexible tunnel
[NASA-CASE-HFS-22636-1] c37 H76-22540

GRACE (W. B.) AND CO., CLARKSVILLE, MD.
Metal containing polymers from cyclic tetrameric
phenylphosphonitrilamides Patent
[NASA-CASE-ECN-10364] c06 H71-27363

GRUNMAN AIRCRAFT ENGINEERING CORP., BETHPAGE, N. Y.
Sealed cabinetry Patent
[NASA-CASE-HSC-12168-1] c09 H71-18600

Out of tolerance warning alarm system for
plurality of monitored circuits Patent
[NASA-CASE-HMS-10984-1] c10 H71-19417

GULF GENERAL ATOMIC, SAN DIEGO, CALIF.
Waveform simulator Patent
[NASA-CASE-HFO-10251] c10 H71-27365

GULTON INDUSTRIES, INC., ALBUQUERQUE, N.MEX.
Analog-to-digital converter
[NASA-CASE-HSC-13110-1] c08 H72-22163

HAMILTON STANDARD, HARTFORD, CONN.
Portable breathing system
[NASA-CASE-HSC-16182-1] c54 H77-21847

HAMILTON STANDARD, WINDSOR LOCKS, CONN.
Venting device for pressurized space suit helmet
Patent
[NASA-CASE-HMS-09652-1] c05 H71-26333

Regenerable device for scrubbing breathable air
of CO2 and moisture without special heat
exchanger equipment
[NASA-CASE-HSC-14771-1] c54 H77-32722

HAMILTON STANDARD DIV., UNITED AIRCRAFT CORP.,
WINDSOR LOCKS, CONN.
Condensate removal device for heat exchanger
[NASA-CASE-HSC-14143-1] c77 H75-20139

HAYES INTERNATIONAL CORP., BIRMINGHAM, ALA.
Space craft soft landing system Patent
[NASA-CASE-HMF-02108] c31 H70-36845

Device for preventing high voltage arcing in
electron beam welding Patent
[NASA-CASE-HMF-08522] c15 H71-19486

HAYES INTERNATIONAL CORP., HUNTSVILLE, ALA.
Method and apparatus for cryogenic wire
stripping Patent
[NASA-CASE-HFS-10340] c15 H71-17628

Self-balancing strain gage transducer Patent
[NASA-CASE-HFS-12827] c14 H71-17656

Automatic closed circuit television arc guidance
control Patent
[NASA-CASE-HFS-13046] c07 H71-19433

HAZLETON LABS., FALLS CHURCH, VA.
Use of the enzyme hexokinase for the reduction
of inherent light levels
[NASA-CASE-IGS-05533] c04 H69-27487

Light detection instrument Patent
[NASA-CASE-IGS-05534] c23 H71-16355

Lyophilized reaction mixtures Patent
[NASA-CASE-IGS-05532] c06 H71-17705

Firefly pump-metering system
[NASA-CASE-GSC-10218-1] c15 H72-21465

HERCULES, INC., WILMINGTON, DEL.
Method of repairing discontinuity in fiberglass
structures
[NASA-CASE-LAR-10416-1] c24 H74-30001

HOPKINS ELECTRONICS CORP., EL MONTE, CALIF.
Method for producing a solar cell having an
integral protective covering
[NASA-CASE-IGS-04531] c03 H69-24267

HONEYWELL, INC., BOPKINS, MINN.
Frequency control network for a current feedback
oscillator Patent
[NASA-CASE-GSC-10041-1] c10 H71-19418

HONEYWELL, INC., MINNEAPOLIS, MINN.
Bus voltage compensation circuit for controlling
direct current motor
[NASA-CASE-HMS-04215-1] c09 H69-39987

Apparatus for overcurrent protection of a
push-pull amplifier Patent
[NASA-CASE-HSC-12033-1] c09 H71-13531

Static inverter Patent
[NASA-CASE-IGS-05289] c09 H71-19470

High impedance measuring apparatus Patent
[NASA-CASE-HMS-08589-1] c09 H71-20569

Clamping assembly for inertial components Patent
[NASA-CASE-HMS-02184] c15 H71-20813

Piezoelectric pump Patent
[NASA-CASE-HMF-05429] c26 H71-21824

Controllers Patent
[NASA-CASE-HMS-07487] c15 H71-23255

Convoluting device for forming convolutions and
the like Patent
[NASA-CASE-HMF-05297] c15 H71-23811

Failure sensing and protection circuit for
converter networks Patent
[NASA-CASE-GSC-10114-1] c10 H71-27366

Voice operated controller Patent
[NASA-CASE-ILA-04063] c31 H71-33160

Load current sensor for a series pulse width
modulated power supply
[NASA-CASE-GSC-10656-1] c09 H72-25249

Radiant source tracker independent of
nonconstant irradiance
[NASA-CASE-HFO-11686] c14 H73-25462

Optical instruments
[NASA-CASE-HSC-14096-1] c74 H74-15095

- Method of forming shrink-fit compression seal
[NASA-CASE-LAB-11563-1] c37 N77-23482
HOUSTON UNIV., TEX.
- Analysis of volatile organic compounds
[NASA-CASE-MSC-14428-1] c23 N77-17161
HOWARD UNIV., WASHINGTON, D. C.
- Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-1] c54 N76-22914
- A cervix-to-rectum measuring device in a radiation applicator for use in the treatment of cervical cancer
[NASA-CASE-GSC-12081-2] c52 N77-26796
- Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-2] c52 N77-27694
HUGHES AIRCRAFT CO., CULVER CITY, CALIF.
- Varactor high level mixer
[NASA-CASE-XGS-02171] c09 N69-24324
- Thermally operated valve Patent
[NASA-CASE-XLE-00815] c15 N70-35407
- Thrust dynamometer Patent
[NASA-CASE-XLE-00702] c14 N70-40203
- Solid state chemical source for ammonia beam maser Patent
[NASA-CASE-XGS-01504] c16 N70-41578
- Canopus detector including automatic gain control of photomultiplier tube Patent
[NASA-CASE-XNP-03914] c21 N71-10771
- Horn feed having overlapping apertures Patent
[NASA-CASE-GSC-10452] c07 N71-12396
- Deflective rod switch with elastic support and sealing means Patent
[NASA-CASE-XNP-05808] c09 N71-12518
- Guidance and maneuver analyzer Patent
[NASA-CASE-XNP-05572] c14 N71-15621
- Method of making screen by casting Patent
[NASA-CASE-XLE-00953] c15 N71-15966
- Fluid flow control valve Patent
[NASA-CASE-XLE-00703] c15 N71-15967
- Low noise single aperture multimode monopulse antenna feed system Patent
[NASA-CASE-XNP-01735] c07 N71-22750
- Multilayer porous ionizer Patent
[NASA-CASE-XNP-04338] c17 N71-23046
- Construction and method of arranging a plurality of ion engines to form a cluster Patent
[NASA-CASE-XNP-02923] c28 N71-23081
- Method for fiberizing ceramic materials Patent
[NASA-CASE-XNP-00597] c18 N71-23088
- Inorganic thermal control pigment Patent
[NASA-CASE-XNP-02139] c18 N71-24184
- Triaxial antenna Patent
[NASA-CASE-XGS-02290] c07 N71-28809
- Variable frequency oscillator with temperature compensation Patent
[NASA-CASE-XNP-03916] c09 N71-28810
- High efficiency ionizer assembly Patent
[NASA-CASE-XNP-01954] c28 N71-28850
- Apparatus for changing the orientation and velocity of a spinning body traversing a path Patent
[NASA-CASE-HCN-00936] c31 N71-29050
- Fabrication of controlled-porosity metals Patent
[NASA-CASE-XNP-04339] c17 N71-29137
- Ion thruster
[NASA-CASE-LEW-10770-1] c28 N72-22770
- Refractory porcelain enamel passive control coating for high temperature alloys
[NASA-CASE-MFS-22324-1] c27 N75-27160
HUGHES AIRCRAFT CO., LOS ANGELES, CALIF.
- Power control circuit
[NASA-CASE-XNP-02713] c10 N69-39888
- Thermal switch Patent
[NASA-CASE-XNP-00463] c33 N70-36847
- Double optic system for ion engine Patent
[NASA-CASE-XNP-02839] c28 N70-41922
- Sample collecting impact bit Patent
[NASA-CASE-XNP-01412] c15 N70-42034
- Bootstrap unloader Patent
[NASA-CASE-XNP-09768] c09 N71-12516
- Difference circuit Patent
[NASA-CASE-XNP-08274] c10 N71-13537
- Gas regulator Patent
[NASA-CASE-MFC-10298] c12 N71-17661
- A dc-coupled noninverting one-shot Patent
[NASA-CASE-XNP-09450] c10 N71-18723
- Phase demodulation system with two phase locked loops Patent
[NASA-CASE-XNP-00777] c10 N71-19469
- High voltage transistor circuit Patent
[NASA-CASE-XNP-06937] c09 N71-19516
- Drift compensation circuit for analog to digital converter Patent
[NASA-CASE-XNP-04780] c08 N71-19687
- System for monitoring the presence of neutrals in a stream of ions Patent
[NASA-CASE-XNP-02592] c24 N71-20518
- Broadband frequency discriminator Patent
[NASA-CASE-NFO-10096] c07 N71-24583
- Flexible, repairable, portable material for electrical connectors Patent
[NASA-CASE-XGS-05180] c18 N71-25881
- Phase multiplying electronic scanning system Patent
[NASA-CASE-NFO-10302] c10 N71-26142
- Narrow bandwidth video Patent
[NASA-CASE-XMS-06740-1] c07 N71-26579
- Solar panel fabrication Patent
[NASA-CASE-XNP-03413] c03 N71-26726
- Method for removing oxygen impurities from cesium Patent
[NASA-CASE-XNP-04262-2] c17 N71-26773
- Virtual wall slot circularly polarized planar array antenna
[NASA-CASE-NFO-10301] c07 N72-11148
- Conical reflector antenna
[NASA-CASE-NFO-10303] c07 N72-22127
- Injector for use in high voltage isolators for liquid feed lines
[NASA-CASE-NFO-11377] c15 N73-27406
- High efficiency multifrequency feed
[NASA-CASE-GSC-11909] c32 N74-20863
- Thiophenyl ether disiloxanes and trisiloxanes useful as lubricant fluids
[NASA-CASE-MFS-22411-1] c37 N74-21058
- Method and apparatus for optically monitoring the angular position of a rotating mirror
[NASA-CASE-GSC-11353-1] c74 N74-21304
- Apparatus and method for determining the position of a radiant energy source
[NASA-CASE-GSC-12147-1] c35 N77-20410
- Wide power range microwave feedback controller
[NASA-CASE-GSC-12146-1] c33 N77-21322
- A system for synchronizing synthesizers of communication systems
[NASA-CASE-GSC-12148-1] c34 N77-22314
- Gregorian all-reflective optical system
[NASA-CASE-GSC-12058-1] c74 N77-26942
- Opto-mechanical subsystem with temperature compensation through isothermal design
[NASA-CASE-GSC-12059-1] c35 N77-27366
HUGHES RESEARCH LABS., MALIBU, CALIF.
- Thrust dynamometer Patent
[NASA-CASE-XLE-05260] c14 N71-20429
- IIT RESEARCH INST., CHICAGO, ILL.**
- Spectral method for monitoring atmospheric contamination of inert-gas welding shields Patent
[NASA-CASE-XNP-02039] c15 N71-15871
- Lightweight refractory insulation and method of preparing the same Patent
[NASA-CASE-XNP-05279] c18 N71-16124
- Stabilized zinc oxide coating compositions Patent
[NASA-CASE-XNP-07770-2] c18 N71-26772
- Synthesis of zinc titanate pigment and coatings containing the same
[NASA-CASE-MFS-13532] c18 N72-17532
- Junction range finder
[NASA-CASE-KSC-10108] c14 N73-25461
- Method of preparing zinc orthotitanate pigment
[NASA-CASE-MFS-23345-1] c27 N77-30237
IMAGE INFORMATION, INC., DANBURY, CONN.
- Recorder/processor apparatus
[NASA-CASE-GSC-11553-1] c35 N74-15831
INCA ENGINEERING CORP., SAN GABRIEL, CALIF.
- Apparatus for establishing flow of a fluid mass having a known velocity
[NASA-CASE-MFS-21424-1] c34 N74-27730
INSTITUTE FOR RESEARCH, INC., HOUSTON, TEX.
- Method of making a perspiration resistant biopotential electrode
[NASA-CASE-BSC-90153-2] c05 N72-25120
INSTITUTE OF RESEARCH AND INSTRUMENTATION, HOUSTON, TEX.
- Pressed disc type sensing electrodes with ion-

screening means Patent
[NASA-CASE-XMS-04212-1] c05 N71-12346
INTERNATIONAL BUSINESS MACHINES CORP., HOPKINSON, N. Y.
Production of crystals from molten solutions
[NASA-CASE-NFO-13969-2] c76 N77-30984
INTERNATIONAL BUSINESS MACHINES CORP., NEW YORK.
Electrical connector pin with wiping action
[NASA-CASE-XMF-04238] c09 N69-39734
Tool attachment for spreading loose elements
away from work Patent
[NASA-CASE-XMF-02107] c15 N71-10809
Redundant memory organization Patent
[NASA-CASE-GSC-10564] c10 N71-29135
INTERNATIONAL HARVESTER CO., SAN DIEGO, CALIF.
Silicide coatings for refractory metals Patent
[NASA-CASE-XLZ-10910] c18 N71-29040
INTERNATIONAL LATEX CORP., DOVER, DEL.
Space suit
[NASA-CASE-MSC-12609-1] c05 N73-32012
ITT CORP., RUTLEY, N.J.
Time division radio relay synchronizing system
using different sync code words for in sync
and out of sync conditions Patent
[NASA-CASE-GSC-10373-1] c07 N71-19773
Tracking receiver Patent
[NASA-CASE-XGS-08679] c10 N71-21473
Satellite interlace synchronization system
[NASA-CASE-GSC-10390-1] c07 N72-11149

J

JET PROPULSION LAB., CALIF. INST. OF TECH., PASADENA.
Pressure variable capacitor
[NASA-CASE-XNP-09752] c14 N69-21541
Rock drill for recovering samples
[NASA-CASE-XNP-07478] c14 N69-21923
Data compression system
[NASA-CASE-XNP-05785] c08 N69-21928
Magnetohydrodynamic induction machine
[NASA-CASE-XNP-07481] c25 N69-21929
Electromechanical actuator
[NASA-CASE-XNP-05975] c15 N69-23185
Refrigeration apparatus
[NASA-CASE-NFO-10309] c15 N69-23190
Direct radiation cooling of the collector of
linear beam tubes
[NASA-CASE-XNP-09227] c15 N69-24319
Excitation and detection circuitry for a flux
responsive magnetic head
[NASA-CASE-XNF-04183] c09 N69-24329
Telemetry word forming unit
[NASA-CASE-XNP-09225] c09 N69-24333
Solid state switch
[NASA-CASE-XNP-09228] c09 N69-27500
Belleville spring assembly with elastic guides
[NASA-CASE-XNP-04552] c15 N69-27504
Trifunctional alcohol
[NASA-CASE-NFO-10714] c06 N69-31244
Plurality of photosensitive cells on a
pyramidal base for planetary trackers
[NASA-CASE-XNP-04180] c07 N69-39736
Coating process
[NASA-CASE-XNP-06508] c18 N69-39895
Bimetallic power controlled actuator
[NASA-CASE-XNP-09776] c09 N69-39929
Piping arrangement through a double chamber
structure
[NASA-CASE-XNP-08882] c15 N69-39935
Micropacked column for a chromatographic system
[NASA-CASE-XNF-04816] c06 N69-39936
Temperature sensitive capacitor device
[NASA-CASE-XNP-09750] c14 N69-39937
Thermionic tantalum emitter doped with oxygen
Patent Application
[NASA-CASE-NFO-11138] c03 N70-34646
Data handling system based on source
significance, storage availability and data
received from the source Patent Application
[NASA-CASE-XNP-04162-1] c08 N70-34675
Electro-optical scanning apparatus Patent
Application
[NASA-CASE-NFO-11106] c14 N70-34697
Liquid junction and method of fabricating the
same Patent Application
[NASA-CASE-NFO-10682] c15 N70-34699
Helium refining by superfluidity Patent
[NASA-CASE-XNP-00733] c06 N70-34946

Means and methods of depositing thin films on
substrates Patent
[NASA-CASE-XNP-00595] c15 N70-34967
Photosensitive device to detect bearing
deviation Patent
[NASA-CASE-XNP-00438] c21 N70-35089
Antenna beam-shaping apparatus Patent
[NASA-CASE-XNP-00611] c09 N70-35219
Temperature-compensating means for cavity
resonator of amplifier Patent
[NASA-CASE-XNP-00449] c14 N70-35220
Parabolic reflector horn feed with spillover
correction Patent
[NASA-CASE-XNP-00540] c09 N70-35382
Means for visually indicating flight paths of
vehicles between the Earth, Venus, and Mercury
Patent
[NASA-CASE-XNF-00708] c14 N70-35394
Space vehicle attitude control Patent
[NASA-CASE-XNP-00465] c21 N70-35395
Binary to binary-coded-decimal converter Patent
[NASA-CASE-XNF-00432] c08 N70-35423
Cassegrainian antenna subreflector flange for
suppressing ground noise Patent
[NASA-CASE-XNP-00683] c09 N70-35425
Ionization vacuum gauge Patent
[NASA-CASE-XNP-00646] c14 N70-35666
Two-fluid magnetohydrodynamic system and method
for thermal-electric power conversion Patent
[NASA-CASE-XNF-00644] c03 N70-36803
Mechanical coordinate converter Patent
[NASA-CASE-XNP-00614] c14 N70-36907
High pressure four-way valve Patent
[NASA-CASE-XNF-00214] c15 N70-36908
Liquid rocket system Patent
[NASA-CASE-XNP-00610] c28 N70-36910
Radar ranging receiver Patent
[NASA-CASE-XNP-00748] c07 N70-36911
Attitude control for spacecraft Patent
[NASA-CASE-XNP-00294] c21 N70-36938
Elastic universal joint Patent
[NASA-CASE-XNF-00416] c15 N70-36947
Apparatus and method for control of a solid
fueled rocket vehicle Patent
[NASA-CASE-XNF-00217] c28 N70-38181
Expulsion bladder-equipped storage tank
structure Patent
[NASA-CASE-XNF-00612] c11 N70-38182
High-voltage cable Patent
[NASA-CASE-XNP-00738] c09 N70-38201
Umbilical separator for rockets Patent
[NASA-CASE-XNF-00425] c11 N70-38202
Multiple Belleville spring assembly Patent
[NASA-CASE-XNP-00840] c15 N70-38225
Ignition system for monopropellant combustion
devices Patent
[NASA-CASE-XNP-00249] c28 N70-38249
Pressure regulating system Patent
[NASA-CASE-XNP-00450] c15 N70-38603
Slit regulated gas journal bearing Patent
[NASA-CASE-XNF-00476] c15 N70-38620
Steerable solid propellant rocket motor Patent
[NASA-CASE-XNP-00234] c28 N70-38645
Space simulator Patent
[NASA-CASE-XNP-00459] c11 N70-38675
Ejection unit Patent
[NASA-CASE-XNP-00676] c15 N70-38996
Time-division multiplexer Patent
[NASA-CASE-XNP-00431] c09 N70-38998
Trajectory-correction propulsion system Patent
[NASA-CASE-XNF-01104] c28 N70-39931
Electrically-operated rotary shutter Patent
[NASA-CASE-XNF-00637] c14 N70-40273
Zero gravity starting means for liquid
propellant motors Patent
[NASA-CASE-XNP-01390] c28 N70-41275
Parallel motion suspension device Patent
[NASA-CASE-XNF-01567] c15 N70-41310
Ignition means for monopropellant Patent
[NASA-CASE-XNP-00876] c28 N70-41311
Reinforcing means for diaphragms Patent
[NASA-CASE-XNP-01962] c14 N70-41370
High pressure filter Patent
[NASA-CASE-XNP-00732] c28 N70-41447
Phase-locked loop with sideband rejecting
properties Patent
[NASA-CASE-XNF-02723] c07 N70-41680
Digital television camera control system Patent
[NASA-CASE-XNF-01472] c14 N70-41807

Antiflutter ball check valve Patent		[NASA-CASE-XNP-03459-2]	c18 N71-15688
[NASA-CASE-XNP-01152]	c15 N70-41811	Intermittent type silica gel adsorption refrigerator Patent	
Roll attitude star sensor system Patent		[NASA-CASE-XNP-00920]	c15 N71-15906
[NASA-CASE-XNP-01307]	c21 N70-41856	Dual mode horn antenna Patent	
Process for preparing sterile solid propellants Patent		[NASA-CASE-XNP-01057]	c07 N71-15907
[NASA-CASE-XNP-01749]	c27 N70-41897	Means for controlling rupture of shock tube diaphragm Patent	
Scaloid construction Patent		[NASA-CASE-XAC-00731]	c11 N71-15960
[NASA-CASE-XNP-01951]	c09 N70-41929	Insertion loss measuring apparatus having transformer beams connected across a pair of bolometers Patent	
Closed loop ranging system Patent		[NASA-CASE-XNP-01193]	c10 N71-16057
[NASA-CASE-XNP-01501]	c21 N70-41930	Polarimeter for transient measurement Patent	
Printed circuit board with bellows rivet connection Patent		[NASA-CASE-XNP-08883]	c23 N71-16101
[NASA-CASE-XNP-05082]	c15 N70-41960	Flexible composite membrane Patent	
Phase-shift data transmission system having a pseudo-noise SYNC code modulated with the data in a single channel Patent		[NASA-CASE-XNP-08837]	c18 N71-16210
[NASA-CASE-XNP-00911]	c08 N70-41961	Mount for thermal control system Patent	
Baseline stabilization system for ionization detector Patent		[NASA-CASE-NFO-10138]	c33 N71-16357
[NASA-CASE-XNP-03128]	c10 N70-41991	Optical characteristics measuring apparatus Patent	
Single or joint amplitude distribution analyzer Patent		[NASA-CASE-XNP-08840]	c23 N71-16365
[NASA-CASE-XNP-01383]	c09 N71-10659	Parallel plate viscometer Patent	
Dual waveguide mode source having control means for adjusting the relative amplitude of two modes Patent		[NASA-CASE-XNP-09462]	c14 N71-17584
[NASA-CASE-XNP-03134]	c07 N71-10676	Means and method of measuring viscoelastic strain Patent	
Method for determining the state of charge of batteries by the use of tracers Patent		[NASA-CASE-XNP-01153]	c32 N71-17645
[NASA-CASE-XNP-01464]	c03 N71-10728	Interferometer direction sensor Patent	
High pressure regulator valve Patent		[NASA-CASE-NFO-10320]	c14 N71-17655
[NASA-CASE-XNP-00710]	c15 N71-10778	Interferometer servo system Patent	
Solar battery with interconnecting means for plural cells Patent		[NASA-CASE-NFO-10300]	c14 N71-17662
[NASA-CASE-XNP-06506]	c03 N71-11050	Electrical spot terminal assembly Patent	
Sealed battery gas manifold construction Patent		[NASA-CASE-NFO-10034]	c15 N71-17685
[NASA-CASE-XNP-03378]	c03 N71-11051	Sealed separable connection Patent	
Solar cell submodule Patent		[NASA-CASE-NFO-10064]	c15 N71-17693
[NASA-CASE-XNP-05821]	c03 N71-11056	Incremental motion drive system Patent	
Reflectometer for receiver input impedance match measurement Patent		[NASA-CASE-XNP-08897]	c15 N71-17694
[NASA-CASE-XNP-10843]	c07 N71-11267	Macrobalance including crystal oscillators for measuring contaminants in a gas system Patent	
Means for generating a sync signal in an FM communication system Patent		[NASA-CASE-NFO-10144]	c14 N71-17701
[NASA-CASE-XNP-10830]	c07 N71-11281	Apparatus and method for protecting a photographic device Patent	
Multi-feed cone Cassegrain antenna Patent		[NASA-CASE-NFO-10174]	c14 N71-18465
[NASA-CASE-NFO-10539]	c07 N71-11285	Ranging system Patent	
Thermionic diode switch Patent		[NASA-CASE-NFO-10066]	c09 N71-18598
[NASA-CASE-NFO-10404]	c03 N71-12255	High impact pressure regulator Patent	
Anti-backlash circuit for hydraulic drive system Patent		[NASA-CASE-NFO-10175]	c14 N71-18625
[NASA-CASE-XNP-01020]	c03 N71-12260	Magnetic core current steering commutator Patent	
Binary number sorter Patent		[NASA-CASE-NFO-10201]	c08 N71-18694
[NASA-CASE-NFO-10112]	c08 N71-12502	Method of using photovoltaic cell using poly-N-vinylcarbazole complex Patent	
Linear three-tap feedback shift register Patent		[NASA-CASE-NFO-10373]	c03 N71-18698
[NASA-CASE-NFO-10351]	c08 N71-12503	A dc-coupled noninverting one-shot Patent	
Binary sequence detector Patent		[NASA-CASE-XNP-09450]	c10 N71-18723
[NASA-CASE-XNP-05415]	c08 N71-12505	Automatic fault correction system for parallel signal channels Patent	
Data compression system with a minimum time delay unit Patent		[NASA-CASE-XNP-03263]	c09 N71-18843
[NASA-CASE-XNP-08832]	c08 N71-12506	Data compression processor Patent	
Magnetic counter Patent		[NASA-CASE-NFO-10068]	c08 N71-19288
[NASA-CASE-XNP-08836]	c09 N71-12515	Tape guidance system and apparatus for the provision thereof Patent	
Operational integrator Patent		[NASA-CASE-XNP-09453]	c08 N71-19420
[NASA-CASE-NFO-10230]	c09 N71-12520	High voltage transistor circuit Patent	
Starting circuit for vapor lamps and the like Patent		[NASA-CASE-XNP-06937]	c09 N71-19516
[NASA-CASE-XNP-01058]	c09 N71-12540	Solar cell matrix Patent	
Matched thermistors for microwave power meters Patent		[NASA-CASE-NFO-10821]	c03 N71-19545
[NASA-CASE-NFO-10348]	c10 N71-12554	Electrical switching device Patent	
Micro current measuring device using plural logarithmic response heated filamentary type diodes Patent		[NASA-CASE-NFO-10037]	c09 N71-19610
[NASA-CASE-XNP-00384]	c09 N71-13530	Drift compensation circuit for analog to digital converter Patent	
Automatic thermal switch Patent		[NASA-CASE-XNP-04780]	c08 N71-19687
[NASA-CASE-XNP-03796]	c23 N71-15467	Roll-up solar array Patent	
Photoelectric energy spectrometer Patent		[NASA-CASE-NFO-10188]	c03 N71-20273
[NASA-CASE-XNP-04161]	c14 N71-15599	Method and device for determining battery state of charge Patent	
Anti-glare improvement for optical imaging systems Patent		[NASA-CASE-NFO-10194]	c03 N71-20407
[NASA-CASE-NFO-10337]	c14 N71-15604	Soil particles separator, collector and viewer Patent	
Fluid flow restrictor Patent		[NASA-CASE-XNP-09770]	c15 N71-20440
[NASA-CASE-NFO-10117]	c15 N71-15608	Transmission line thermal short Patent	
High temperature lens construction Patent		[NASA-CASE-XNP-09775]	c09 N71-20445
[NASA-CASE-XNP-04111]	c14 N71-15622	Synchronous servo loop control system Patent	
Solder flux which leaves corrosion-resistant coating Patent		[NASA-CASE-XNP-03744]	c10 N71-20448
		Processing for producing a sterilized instrument Patent	
		[NASA-CASE-XNP-09763]	c14 N71-20461
		Signal-to-noise ratio estimating by taking ratio of mean and standard deviation of integrated signal samples Patent	
		[NASA-CASE-XNP-05254]	c07 N71-20791

Elimination of frequency shift in a multiplex communication system Patent		Detenting servomotor Patent	
[NASA-CASE-XNP-01306]	c07 N71-20814	[NASA-CASE-XNP-06936]	c15 N71-24695
High power-high voltage waterload Patent		Reversible motion drive system Patent	
[NASA-CASE-XNP-05381]	c09 N71-20842	[NASA-CASE-NFO-10173]	c15 N71-24696
Coaxial cable connector Patent		Decoder system Patent	
[NASA-CASE-XNP-04732]	c09 N71-20851	[NASA-CASE-NFO-10118]	c07 N71-24741
Soldering with solder flux which leaves corrosion resistant coating Patent		Television signal processing system Patent	
[NASA-CASE-XNP-03459]	c15 N71-21078	[NASA-CASE-NFO-10140]	c07 N71-24742
Miniature stress transducer Patent		Switching circuit Patent	
[NASA-CASE-XNP-02983]	c14 N71-21091	[NASA-CASE-XNP-06505]	c10 N71-24799
Holder for crystal resonators Patent		Magnetic power switch Patent	
[NASA-CASE-XNP-03637]	c15 N71-21311	[NASA-CASE-NFO-10242]	c09 N71-24803
Correlator function apparatus Patent		Remodulator filter Patent	
[NASA-CASE-XNP-00746]	c07 N71-21476	[NASA-CASE-NFO-10198]	c09 N71-24806
Split nut separation system Patent		Broadband microwave waveguide window Patent	
[NASA-CASE-XNP-06914]	c15 N71-21489	[NASA-CASE-XNP-08880]	c09 N71-24808
Light position locating system Patent		Cavity radiometer Patent	
[NASA-CASE-XNP-01059]	c23 N71-21821	[NASA-CASE-XNP-08961]	c14 N71-24809
Electron bombardment ion engine Patent		High-gain, broadband traveling wave maser Patent	
[NASA-CASE-XNP-04124]	c28 N71-21822	[NASA-CASE-NFO-10548]	c16 N71-24831
Data compressor Patent		Fluid containers and resealable septum therefor Patent	
[NASA-CASE-XNP-04067]	c08 N71-22707	[NASA-CASE-NFO-10123]	c15 N71-24835
Error correcting method and apparatus Patent		Temperature telemetric transmitter Patent	
[NASA-CASE-XNP-02748]	c08 N71-22749	[NASA-CASE-NFO-10649]	c07 N71-24840
Counter and shift register Patent		Tuning arrangement for an electron discharge device or the like Patent	
[NASA-CASE-XNP-01753]	c08 N71-22897	[NASA-CASE-XNP-09771]	c09 N71-24841
Friction measuring apparatus Patent		Noise limiter Patent	
[NASA-CASE-XNP-08680]	c14 N71-22995	[NASA-CASE-NFO-10169]	c10 N71-24844
Hybrid lubrication system and bearing Patent		Noninterruptable digital counting system Patent	
[NASA-CASE-XNP-01641]	c15 N71-22997	[NASA-CASE-XNP-09759]	c08 N71-24891
Filler valve Patent		Drive circuit for minimizing power consumption in inductive load Patent	
[NASA-CASE-XNP-01747]	c15 N71-23024	[NASA-CASE-NFO-10716]	c09 N71-24892
Refrigeration apparatus Patent		Space simulator Patent	
[NASA-CASE-XNP-06677]	c15 N71-23025	[NASA-CASE-NFO-10141]	c11 N71-24964
Reduced bandwidth video communication system utilizing sampling techniques Patent		Process for reducing secondary electron emission Patent	
[NASA-CASE-XNP-02791]	c07 N71-23026	[NASA-CASE-XNP-09469]	c24 N71-25555
Model launcher for wind tunnels Patent		Minimal logic block encoder Patent	
[NASA-CASE-XNP-03578]	c11 N71-23030	[NASA-CASE-NFO-10595]	c10 N71-25917
Drive circuit utilizing two cores Patent		Novel polycarboxylic prepolymeric materials and polymers thereof Patent	
[NASA-CASE-XNP-01318]	c10 N71-23033	[NASA-CASE-NFO-10596]	c06 N71-25929
Solar vane actuator Patent		Current steering switch Patent	
[NASA-CASE-XNP-05535]	c14 N71-23040	[NASA-CASE-XNP-08567]	c09 N71-26000
Time of flight mass spectrometer with feedback means from the detector to the low source and a specific counter Patent		Dual polarity full wave dc motor drive Patent	
[NASA-CASE-XNP-01056]	c14 N71-23041	[NASA-CASE-XNP-07477]	c09 N71-26092
Connector internal force gauge Patent		High impact antenna Patent	
[NASA-CASE-XNP-03918]	c14 N71-23087	[NASA-CASE-NFO-10231]	c07 N71-26101
Circulator having quarter wavelength resonant post and parametric amplifier circuits utilizing the same Patent		Video communication system and apparatus Patent	
[NASA-CASE-XNP-02140]	c09 N71-23097	[NASA-CASE-XNP-06611]	c07 N71-26102
Method of resolving clock synchronization error and means therefor Patent		Parallel generation of the check bits of a PN sequence Patent	
[NASA-CASE-XNP-08875]	c10 N71-23099	[NASA-CASE-XNP-04623]	c10 N71-26103
Impact testing machine Patent		Phase multiplying electronic scanning system Patent	
[NASA-CASE-XNP-04817]	c14 N71-23225	[NASA-CASE-NFO-10302]	c10 N71-26142
Zeta potential flowmeter Patent		Electron beam tube containing a multiple cathode array employing indexing means for cathode substitution Patent	
[NASA-CASE-XNP-06509]	c14 N71-23226	[NASA-CASE-NFO-10625]	c09 N71-26182
Comparator for the comparison of two binary numbers Patent		Fluid phase analyzer Patent	
[NASA-CASE-XNP-04819]	c08 N71-23295	[NASA-CASE-NFO-10691]	c14 N71-26199
Decontamination of petroleum products Patent		Variable frequency nuclear magnetic resonance spectrometer Patent	
[NASA-CASE-XNP-03835]	c06 N71-23499	[NASA-CASE-XNP-09830]	c14 N71-26266
Dicyanoacetylene polymers Patent		Time synchronization system utilizing moon reflected coded signals Patent	
[NASA-CASE-XNP-03250]	c06 N71-23500	[NASA-CASE-NFO-10143]	c10 N71-26326
Indexing microwave switch Patent		Broadband stable power multiplier Patent	
[NASA-CASE-XNP-06507]	c09 N71-23548	[NASA-CASE-XNP-10854]	c10 N71-26331
Millimeter wave radiometer for radio astronomy Patent		Cascaded complementary pair broadband transistor amplifiers Patent	
[NASA-CASE-XNP-09832]	c30 N71-23723	[NASA-CASE-NFO-10003]	c10 N71-26415
Radiant energy intensity measurement system Patent		Digital memory in which the driving of each word location is controlled by a switch core Patent	
[NASA-CASE-XNP-06510]	c14 N71-23797	[NASA-CASE-XNP-01466]	c10 N71-26434
High speed phase detector Patent		Conically shaped cavity radiometer with a dual purpose cone winding Patent	
[NASA-CASE-XNP-01306-2]	c09 N71-24596	[NASA-CASE-XNP-09701]	c14 N71-26475
Apparatus for testing polymeric materials Patent		Analog signal integration and reconstruction system Patent	
[NASA-CASE-XNP-09699]	c06 N71-24607	[NASA-CASE-NFO-10344]	c10 N71-26544
Digital synchronizer Patent		Rapid sync acquisition system Patent	
[NASA-CASE-NFO-10851]	c07 N71-24613	[NASA-CASE-NFO-10214]	c10 N71-26577
Signal processing apparatus for multiplex transmission Patent		Cryogenic cooling system Patent	
[NASA-CASE-XNP-01388]	c07 N71-24622	[NASA-CASE-NFO-10467]	c23 N71-26654
Self-testing and repairing computer Patent			
[NASA-CASE-NFO-10567]	c08 N71-24633		
Serial digital decoder Patent			
[NASA-CASE-NFO-10150]	c08 N71-24650		

Vacuum evaporator with electromagnetic ion steering Patent		
[NASA-CASE-NFO-10331]	c09	N71-26701
Automated fluid chemical analyzer Patent		
[NASA-CASE-NXP-09451]	c06	N71-26754
Material handling device Patent		
[NASA-CASE-NXP-09770-3]	c11	N71-27036
Pressure seal Patent		
[NASA-CASE-NFO-10796]	c15	N71-27068
Multiducted electromagnetic pump Patent		
[NASA-CASE-NFO-10755]	c15	N71-27084
Peak acceleration limiter for vibrational tester Patent		
[NASA-CASE-NFO-10556]	c14	N71-27185
Thin film capacitive bolometer and temperature sensor Patent		
[NASA-CASE-NFO-10607]	c09	N71-27232
Black body cavity radiometer Patent		
[NASA-CASE-NFO-10810]	c14	N71-27323
Video signal enhancement system with dynamic range compression and modulation index expansion Patent		
[NASA-CASE-NFO-10343]	c07	N71-27341
Force-balanced, throttle valve Patent		
[NASA-CASE-NFO-10808]	c15	N71-27432
Cavity emitter for thermionic converter Patent		
[NASA-CASE-NFO-10412]	c09	N71-28421
Frictionless universal joint Patent		
[NASA-CASE-NFO-10646]	c15	N71-28467
Epoxy-aziridine polymer product Patent		
[NASA-CASE-NFO-10701]	c06	N71-28620
Fluid impervious barrier including liquid metal alloy and method of making same Patent		
[NASA-CASE-NXP-08881]	c17	N71-28747
Wind tunnel microphone structure Patent		
[NASA-CASE-NXP-00250]	c11	N71-28779
Trialkyl-dibaltantalum and niobium compounds Patent		
[NASA-CASE-NXP-04023]	c06	N71-28808
Digital memory sense amplifying means Patent		
[NASA-CASE-NXP-01012]	c08	N71-28925
Digital filter for reducing sampling jitter in digital control systems Patent		
[NASA-CASE-NFO-11088]	c08	N71-29034
Method and apparatus for aligning a laser beam projector Patent		
[NASA-CASE-NFO-11087]	c23	N71-29125
Rubber composition for use with hydrazine Patent Application		
[NASA-CASE-NFO-11433]	c18	N71-31140
Rotable accurate reflector system for telescopes Patent		
[NASA-CASE-NFO-10468]	c23	N71-33229
Encoder/decoder system for a rapidly synchronizable binary code Patent		
[NASA-CASE-NFO-10342]	c10	N71-33407
High power microwave power divider Patent		
[NASA-CASE-NFO-11031]	c07	N71-33606
A dc servosystem including an ac motor Patent		
[NASA-CASE-NFO-10700]	c07	N71-33613
Solar cell matrix		
[NASA-CASE-NFO-11190]	c03	N71-34044
Manually actuated heat pump		
[NASA-CASE-NFO-10677]	c05	N72-11084
Virtual wall slot circularly polarized planar array antenna		
[NASA-CASE-NFO-10301]	c07	N72-11148
System for controlling the operation of a variable signal device		
[NASA-CASE-NFO-11064]	c07	N72-11150
Method and apparatus for data compression by a decreasing slope threshold test		
[NASA-CASE-NFO-10769]	c08	N72-11171
Apparatus for remote measurement of displacement of marks on a specimen undergoing a tensile test		
[NASA-CASE-NFO-10778]	c14	N72-11364
Vibration isolation system using compression springs		
[NASA-CASE-NFO-11012]	c15	N72-11391
Feed system for an ion thruster		
[NASA-CASE-NFO-10737]	c28	N72-11709
Thermostatic actuator		
[NASA-CASE-NFO-10637]	c15	N72-12409
High voltage transistor amplifier with constant current load		
[NASA-CASE-NFO-11023]	c09	N72-17155
Reference voltage switching unit		
[NASA-CASE-NFO-11253]	c09	N72-17157
Valving device for automatic refilling in cryogenic liquid systems		
[NASA-CASE-NFO-11177]	c15	N72-17453
Expandable support means		
[NASA-CASE-NFO-11059]	c15	N72-17454
Breakaway connector		
[NASA-CASE-NFO-11140]	c15	N72-17455
Modular encoder		
[NASA-CASE-NFO-10629]	c08	N72-18184
Transition tracking bit synchronization system		
[NASA-CASE-NFO-10844]	c07	N72-20140
Data compression system		
[NASA-CASE-NFO-11243]	c07	N72-20154
Digital quasi-exponential function generator		
[NASA-CASE-NFO-11130]	c08	N72-20176
Method and apparatus for high resolution spectral analysis		
[NASA-CASE-NFO-10748]	c08	N72-20177
Flow rate switch		
[NASA-CASE-NFO-10722]	c09	N72-20199
Electrical connector		
[NASA-CASE-NFO-10694]	c09	N72-20200
Wide band doubler and sine wave quadrature generator		
[NASA-CASE-NFO-11133]	c10	N72-20223
Signal phase estimator		
[NASA-CASE-NFO-11203]	c10	N72-20224
Optimal control system for an electric motor driven vehicle		
[NASA-CASE-NFO-11210]	c11	N72-20244
Impact energy absorbing system utilizing fractureable material		
[NASA-CASE-NFO-10671]	c15	N72-20443
Torsional disconnect unit		
[NASA-CASE-NFO-10704]	c15	N72-20445
Solid propellant rocket motor		
[NASA-CASE-NXP-03282]	c28	N72-20758
Shell side liquid metal boiler		
[NASA-CASE-NFO-10831]	c33	N72-20915
Method and apparatus for mapping planets		
[NASA-CASE-NFO-11001]	c07	N72-21118
Current steering commutator		
[NASA-CASE-NFO-10743]	c08	N72-21199
Automated equipotential plotter		
[NASA-CASE-NFO-11134]	c09	N72-21246
Pressure transducer		
[NASA-CASE-NFO-10832]	c14	N72-21405
Positioning mechanism		
[NASA-CASE-NFO-10679]	c15	N72-21462
Solid state matrices		
[NASA-CASE-NFO-10591]	c03	N72-22041
Solar cell panels with light transmitting plate		
[NASA-CASE-NFO-10747]	c03	N72-22042
Data multiplexer using tree switching configuration		
[NASA-CASE-NFO-11333]	c08	N72-22162
System for quantizing graphic displays		
[NASA-CASE-NFO-10745]	c08	N72-22164
Digital function generator		
[NASA-CASE-NFO-11104]	c08	N72-22165
Analog-to-digital converter analyzing system		
[NASA-CASE-NFO-10560]	c08	N72-22166
Feedback shift register with states decomposed into cycles of equal length		
[NASA-CASE-NFO-11082]	c08	N72-22167
Self-obturator, gas operated launcher		
[NASA-CASE-NFO-11013]	c11	N72-22247
Optical binocular scanning apparatus		
[NASA-CASE-NFO-11002]	c14	N72-22441
Ionene membrane separator		
[NASA-CASE-NFO-11091]	c18	N72-22567
Deployable solar cell array		
[NASA-CASE-NFO-10883]	c31	N72-22874
Thermal to electrical power conversion system with solid-state switches with Seebeck effect compensation		
[NASA-CASE-NFO-11388]	c03	N72-23048
Optical frequency waveguide and transmission system		
[NASA-CASE-NXP-10541-3]	c23	N72-23695
Bipropellant injector		
[NASA-CASE-NXP-09461]	c28	N72-23809
Solid propellant rocket motor nozzle		
[NASA-CASE-NFO-11458]	c28	N72-23810
Analysis of hydrogen-deuterium mixtures		
[NASA-CASE-NFO-11322]	c06	N72-25146
Flexible computer accessed telemetry		
[NASA-CASE-NFO-11358]	c07	N72-25172

Multi-purpose antenna employing dish reflector with plural coaxial horn feeds [NASA-CASE-NFO-11264]	c07 N72-25174	Electrolytic gas operated actuator [NASA-CASI-NFO-11369]	c15 N73-13467
Communications link for computers [NASA-CASI-NFO-11161]	c08 N72-25207	Dual purpose momentum wheels for spacecraft with magnetic recording [NASA-CASE-NFO-11481]	c21 N73-13644
Method and apparatus for frequency-division multiplex communications by digital phase shift of carrier [NASA-CASI-NFO-11338]	c08 N72-25208	Multiple reflection conical microwave antenna [NASA-CASE-NFO-11661]	c07 N73-14130
Binary coded sequential acquisition ranging system [NASA-CASI-NFO-11194]	c08 N72-25209	Cyclically operable optical shutter [NASA-CASE-NFO-10758]	c14 N73-14427
MCD 2 sequential function generator for multibit binary sequence [NASA-CASE-NFO-10636]	c08 N72-25210	Heat detection and compositions and devices therefor [NASA-CASE-NFO-10764-1]	c14 N73-14428
Digital video display system using cathode ray tube [NASA-CASI-NFO-11342]	c09 N72-25248	Parallel-plate viscometer with double diaphragm suspension [NASA-CASE-NFO-11387]	c14 N73-14429
Inverter oscillator with voltage feedback [NASA-CASE-NFO-10760]	c09 N72-25254	Rotary actuator [NASA-CASE-NFO-10680]	c31 N73-14855
Thermal motor [NASA-CASE-NFO-11283]	c09 N72-25260	Magnetically actuated tuning method for Gunn oscillators [NASA-CASE-NFO-12106]	c09 N73-15235
Two phase flow system with discrete impinging two-phase jets [NASA-CASI-NFO-11556]	c12 N72-25292	Multichannel telemetry system [NASA-CASE-NFO-11572]	c07 N73-16121
Atmospheric sampling devices [NASA-CASE-NFO-11373]	c13 N72-25323	Data-aided carrier tracking loops [NASA-CASI-NFO-11282]	c10 N73-16205
Light sensor [NASA-CASE-NFO-11311]	c14 N72-25414	Stacked solar cell arrays [NASA-CASI-NFO-11771]	c03 N73-20040
Quick disconnect coupling [NASA-CASE-NFO-11202]	c15 N72-25450	A m-ary linear feedback shift register with binary logic [NASA-CASE-NFO-11868]	c10 N73-20254
Coaxial injector for reaction motors [NASA-CASI-NFO-11095]	c15 N72-25455	Apparatus for recovering matter adhered to a host surface [NASA-CASE-NFO-11213]	c15 N73-20514
Ball screw linear actuator [NASA-CASE-NFO-11222]	c15 N72-25456	Scan converting video tape recorder [NASA-CASE-NFO-10166-1]	c07 N73-22076
Helium refrigerator and method for decontaminating the refrigerator [NASA-CASE-NFO-10634]	c23 N72-25619	Collapsible structure for an antenna reflector [NASA-CASE-NFO-11751]	c07 N73-24176
Uninsulated in-core thermionic diode [NASA-CASE-NFO-10542]	c09 N72-27228	Pump for delivering heated fluids [NASA-CASE-NFO-11417]	c15 N73-24513
Audio frequency marker system [NASA-CASE-NFO-11147]	c14 N72-27408	Ion thruster with a combination keeper electrode and electron baffle [NASA-CASI-NFO-11880]	c28 N73-24783
Light direction sensor [NASA-CASE-NFO-11201]	c14 N72-27409	Solid propellant rocket motor [NASA-CASE-NFO-11559]	c28 N73-24784
Adjustable support [NASA-CASE-NFO-10721]	c15 N72-27484	Code regenerative clean-up loop transponder for a mu-type ranging system [NASA-CASE-NFO-11707]	c07 N73-25161
Method for controlling vapor content of a gas [NASA-CASE-NFO-10633]	c03 N72-28025	Numerical computer peripheral interactive device with manual controls [NASA-CASI-NFO-11497]	c08 N73-25206
Maser for frequencies in the 7-20 GHz range [NASA-CASE-NFO-11437]	c16 N72-28521	Radiant source tracker independent of nonconstant irradiance [NASA-CASE-NFO-11686]	c14 N73-25462
Thin film temperature sensor and method of making same [NASA-CASI-NFO-11775]	c26 N72-28761	Two carrier communication system with single transmitter [NASA-CASE-NFO-11548]	c07 N73-26118
Circularly polarized antenna [NASA-CASE-NFO-10214]	c09 N72-31235	High pulse rate high resolution optical radar system [NASA-CASE-NFO-11426]	c07 N73-26119
Singly-curved reflector for use in high-gain antennas [NASA-CASE-NFO-11361]	c07 N72-32169	Counting digital filters [NASA-CASE-NFO-11821-1]	c08 N73-26175
Digital slope threshold data compressor [NASA-CASE-NFO-11630]	c08 N72-33172	Automated attendance accounting system [NASA-CASE-NFO-11456]	c08 N73-26176
Continuously variable voltage controlled phase shifter [NASA-CASE-NFO-11129]	c09 N72-33204	Low phase noise digital frequency divider [NASA-CASE-NFO-11569]	c10 N73-26229
Pseudonoise sequence generators with three tap linear feedback shift registers [NASA-CASE-NFO-11406]	c08 N73-12175	Vehicle for use in planetary exploration [NASA-CASE-NFO-11366]	c11 N73-26238
Versatile arithmetic unit for high speed sequential decoder [NASA-CASE-NFO-11371]	c08 N73-12177	Temperature control system with a pulse width modulated bridge [NASA-CASE-NFO-11304]	c14 N73-26430
Dual frequency microwave reflex feed [NASA-CASE-NFO-13091-1]	c09 N73-12214	Disconnect unit [NASA-CASE-NFO-11330]	c33 N73-26958
Audio system with means for reducing noise effects [NASA-CASE-NFO-11631]	c10 N73-12244	Filter for third order phase locked loops [NASA-CASE-NFO-11941-1]	c10 N73-27171
Interferometer-polarimeter [NASA-CASE-NFO-11239]	c14 N73-12446	Receiver with an improved phase lock loop in a multichannel telemetry system with suppressed carrier [NASA-CASE-NFO-11593-1]	c07 N73-28014
Irradiance measuring device [NASA-CASE-NFO-11493]	c14 N73-12447	Analog-to-digital converter [NASA-CASE-NFO-00477]	c08 N73-28045
Program for computer aided reliability estimation [NASA-CASE-NFO-13086-1]	c15 N73-12495	Pseudonoise (PN) synchronization of data system with derivation of clock frequency from received signal for clocking receiver PN generator [NASA-CASE-NFO-03623]	c09 N73-28084
Apparatus for deriving synchronizing pulses from pulses in a single channel PCM communications system [NASA-CASE-NFO-11302-1]	c07 N73-13149	Apparatus and method for measuring the Seebeck coefficient and resistivity of materials [NASA-CASE-NFO-11749]	c14 N73-28486
Rotary vane attenuator wherein rotor has orthogonally disposed resistive and dielectric cards [NASA-CASE-NFO-11418-1]	c14 N73-13420	Dual purpose optical instrument capable of simultaneously acting as spectrometer and	
Gas flow control device [NASA-CASE-NFO-11479]	c15 N73-13462		

diffractionmeter			
[NASA-CASE-XNP-05231]	c14	N73-28491	
Continuous magnetic flux pump			
[NASA-CASE-XNF-01187]	c15	N73-28516	
Preparation of alkali metal dispersions			
[NASA-CASE-XNP-08876]	c17	N73-28573	
Superconductive magnetic-field-trapping device			
[NASA-CASE-XNP-01185]	c26	N73-28710	
Automatic carrier acquisition system			
[NASA-CASE-NFO-11628-1]	c07	N73-30113	
Perofluidic sclenoid			
[NASA-CASE-NFO-11738-1]	c09	N73-30185	
Silent emergency alarm system for schools and the like			
[NASA-CASE-NFO-11307-1]	c10	N73-30205	
RF-source resistance meters			
[NASA-CASE-NFO-11291-1]	c14	N73-30388	
Event sequence detector			
[NASA-CASE-NFO-11703-1]	c10	N73-32144	
Scal penetrometer			
[NASA-CASE-XNF-05530]	c14	N73-32321	
Quadrupole mass filter with means to generate a noise spectrum exclusive of the resonant frequency of the desired ions to deflect stable ions			
[NASA-CASE-XNF-04231]	c14	N73-32325	
Magnetic-flux pump			
[NASA-CASE-XNP-01188]	c15	N73-32361	
Burrowing apparatus			
[NASA-CASE-XNP-07169]	c15	N73-32362	
Electrostatically controlled heat shutter			
[NASA-CASE-NFO-11942-1]	c33	N73-32818	
Method and apparatus for a single channel digital communications system			
[NASA-CASE-NFO-11302-2]	c32	N74-10132	
Controlled oscillator system with a time dependent output frequency			
[NASA-CASE-NFO-11962-1]	c33	N74-10194	
Low loss dichroic plate			
[NASA-CASE-NFO-13171-1]	c32	N74-11000	
Image data rate converter having a drum with a fixed head and a rotatable head			
[NASA-CASE-NFO-11659-1]	c35	N74-11283	
Monitoring atmospheric pollutants with a heterodyne radiometer transmitter-receiver			
[NASA-CASE-NFO-11919-1]	c35	N74-11284	
Digital second-order phase-locked loop			
[NASA-CASE-NFO-11905-1]	c33	N74-12887	
Automatic vehicle location system			
[NASA-CASE-NFO-11850-1]	c32	N74-12912	
Thermomagnetic recording and magneto-optic playback system having constant intensity laser beam control			
[NASA-CASE-NFO-11317-2]	c36	N74-13205	
Use of thin film light detector			
[NASA-CASE-NFO-11432-2]	c35	N74-15090	
Temperature compensated digital inertial sensor			
[NASA-CASE-NFO-13044-1]	c35	N74-15094	
Compact hydrogenator			
[NASA-CASE-NFO-11682-1]	c35	N74-15127	
Short range laser obstacle detector			
[NASA-CASE-NFO-11856-1]	c36	N74-15145	
System for stabilizing cable phase delay utilizing a coaxial cable under pressure			
[NASA-CASE-NFO-13138-1]	c33	N74-17927	
Storage battery comprising negative plates of a wedge shaped configuration			
[NASA-CASE-NFO-11806-1]	c44	N74-19693	
Gated compressor, distortionless signal limiter			
[NASA-CASE-NFO-11820-1]	c32	N74-19788	
Apparatus for scanning the surface of a cylindrical body			
[NASA-CASE-NFO-11861-1]	c36	N74-20009	
Decision feedback loop for tracking a polyphase modulated carrier			
[NASA-CASE-NFO-13103-1]	c32	N74-20811	
Optically actuated two position mechanical mover			
[NASA-CASE-NFO-13105-1]	c37	N74-21060	
Thin film gauge			
[NASA-CASE-NFO-10617-1]	c35	N74-22095	
High isolation RF signal selection switches			
[NASA-CASE-NFO-13081-1]	c33	N74-22814	
Single reflector interference spectrometer and drive system therefor			
[NASA-CASE-NFO-11952-1]	c35	N74-23040	
Scanning nozzle plating system			
[NASA-CASE-NFO-11758-1]	c31	N74-23065	
Rock sampling			
[NASA-CASE-XNP-10007-1]	c46	N74-23068	
Rock sampling			
[NASA-CASE-XNF-09755]	c46	N74-23069	
Miniature multichannel biotelemetry system			
[NASA-CASE-NFO-13065-1]	c52	N74-26625	
Dispensing targets for ion beam particle generators			
[NASA-CASE-NFO-13112-1]	c73	N74-26767	
Optically detonated explosive device			
[NASA-CASE-NFO-11743-1]	c28	N74-27425	
High voltage, high current Schottky barrier solar cell			
[NASA-CASE-NFO-13482-1]	c44	N74-30448	
Coherent receiver employing nonlinear coherence detection for carrier tracking			
[NASA-CASE-NFO-11921-1]	c32	N74-30523	
Digital servo control of random sound test excitation			
[NASA-CASE-NFO-11623-1]	c71	N74-31148	
Apparatus for forming drive belts			
[NASA-CASE-NFO-13205-1]	c31	N74-32917	
Tool for use in lifting pin supported objects			
[NASA-CASE-NFO-13157-1]	c37	N74-32918	
Preparing oxidizer coated metal fuel particles			
[NASA-CASE-NFO-11975-1]	c28	N74-33209	
Geneva mechanism			
[NASA-CASE-NFO-13281-1]	c37	N75-13266	
Method of producing a storage bulb for an atomic hydrogen maser			
[NASA-CASE-NFO-13050-1]	c36	N75-15029	
Combined pressure regulator and shutoff valve			
[NASA-CASE-NFO-13201-1]	c37	N75-15050	
Simultaneous acquisition of tracking data from two stations			
[NASA-CASE-NFO-13292-1]	c34	N75-15854	
Soft X-ray laser using crystal channels as distributed feedback cavities			
[NASA-CASE-NFO-13532-1]	c36	N75-15973	
Shock absorbing mount for electrical components			
[NASA-CASE-NFO-13253-1]	c37	N75-18573	
System for generating timing and control signals			
[NASA-CASE-NFO-13125-1]	c33	N75-19519	
Motor run-up system			
[NASA-CASE-NFO-13374-1]	c33	N75-19524	
Frequency scanning particle size spectrometer			
[NASA-CASE-NFO-13606-1]	c35	N75-19627	
Particle size spectrometer and refractometer			
[NASA-CASE-NFO-13614-1]	c35	N75-19628	
Deep trap, laser activated image converting system			
[NASA-CASE-NFO-13131-1]	c36	N75-19652	
Multitarget sequential sputtering apparatus			
[NASA-CASE-NFO-13345-1]	c37	N75-19684	
Method and apparatus for providing a servodrive signal in a high speed stepping interferometer			
[NASA-CASE-NFO-13569-1]	c35	N75-21600	
Motion restraining device			
[NASA-CASE-NFO-13619-1]	c37	N75-22748	
Wide angle sun sensor			
[NASA-CASE-NFO-13327-1]	c35	N75-23910	
Material suspension within an acoustically excited resonant chamber			
[NASA-CASE-NFO-13263-1]	c12	N75-24774	
Heat operated cryogenic electrical generator			
[NASA-CASE-NFO-13303-1]	c20	N75-24637	
System for interference signal nulling by polarization-adjustment			
[NASA-CASE-NFO-13140-1]	c32	N75-24982	
Heat detection and compositions and devices therefor			
[NASA-CASE-NFO-10764-2]	c35	N75-25122	
Servo-controlled intravital microscope system			
[NASA-CASE-NFO-13214-1]	c35	N75-25123	
Vehicle locating system utilizing AM broadcasting station carriers			
[NASA-CASE-NFO-13217-1]	c32	N75-26194	
Asynchronous, multiplexing, single line transmission and recovery data system			
[NASA-CASE-NFO-13321-1]	c32	N75-26195	
Fluorescence detector for monitoring atmospheric pollutants			
[NASA-CASE-NFO-13231-1]	c45	N75-27585	
Cooperative multiaxis sensor for teleoperation of article manipulating apparatus			
[NASA-CASE-NFO-13386-1]	c54	N75-27758	
Heat sterilizable patient ventilator			
[NASA-CASE-NFO-13313-1]	c54	N75-27761	
Low cost solar energy collection system			
[NASA-CASE-NFO-13579-1]	c44	N75-28519	
Refrigerated coaxial coupling			
[NASA-CASE-NFO-13504-1]	c33	N75-30430	

Electric power generation system directory from laser power	[NASA-CASE-NFO-13308-1]	c36 N75-30524	Shared memory for a fault-tolerant computer	[NASA-CASE-NFO-13139-1]	c60 N76-21914
Subminiature insertable force transducer	[NASA-CASE-NFO-13423-1]	c33 N75-31329	Wind sensor	[NASA-CASE-NFO-13462-1]	c35 N76-24524
Symmetrical odd-modulus frequency divider	[NASA-CASE-NFO-13426-1]	c33 N75-31330	Fiber distributed feedback laser	[NASA-CASE-NFO-13531-1]	c36 N76-24553
Stored charge transistor	[NASA-CASE-NFO-11156-2]	c33 N75-31331	Graphite reinforced bone cement	[NASA-CASE-NFO-13764-1]	c24 N76-26281
Doped Josephson tunneling junction for use in a sensitive IR detector	[NASA-CASE-NFO-13348-1]	c33 N75-31332	Method and apparatus for automatic load sharing among paralleled converters	[NASA-CASE-NFO-13832-1]	c33 N76-26393
Acoustically controlled distributed feedback laser	[NASA-CASE-NFO-13175-1]	c36 N75-31427	Photoelectron spectrometer with means for stabilizing sample surface potential	[NASA-CASE-NFO-13772-1]	c35 N76-26450
Inert gas metallic vapor laser	[NASA-CASE-NFO-13449-1]	c36 N75-32441	Portable, linear-focused solar thermal energy collecting system	[NASA-CASE-NFO-13734-1]	c44 N76-26690
High temperature resistant cermet and ceramic composites	[NASA-CASE-NFO-13690-1]	c27 N76-13294	RF beam center location method and apparatus for power transmission system	[NASA-CASE-NFO-13821-1]	c44 N76-26692
Helium refrigerator	[NASA-CASE-NFO-13435-1]	c31 N76-14284	Method and apparatus for generating coherent radiation in the ultra-violet region and above by use of distributed feedback	[NASA-CASE-NFO-13346-1]	c36 N76-29575
Nonlinear crossingular feedback shift registers	[NASA-CASE-NFO-13451-1]	c33 N76-14373	Stirling cycle engine and refrigeration systems	[NASA-CASE-NFO-13613-1]	c37 N76-29590
Strain gage mounting assembly	[NASA-CASE-NFO-13170-1]	c35 N76-14430	Hydrogen rich gas generator	[NASA-CASE-NFO-13342-2]	c44 N76-29700
Interferometer mirror tilt correcting system	[NASA-CASE-NFO-13687-1]	c35 N76-14433	Solar-powered pump	[NASA-CASE-NFO-13567-1]	c44 N76-29701
Forward-scatter polarimeter for determining the gaseous depolarization factor in the presence of polluting polydispersed particles	[NASA-CASE-NFO-13756-1]	c35 N76-14434	Hydrogen rich gas generator	[NASA-CASE-NFO-13464-2]	c44 N76-29704
Thermostatically controlled non-tracking type solar energy concentrator	[NASA-CASE-NFO-13497-1]	c44 N76-14602	Myocardium wall thickness transducer and measuring method	[NASA-CASE-NFO-13644-1]	c52 N76-29895
Multi-computer multiple data path hardware exchange system	[NASA-CASE-NFO-13422-1]	c60 N76-14818	Catheter tip force transducer for cardiovascular research	[NASA-CASE-NFO-13643-1]	c52 N76-29896
Cermet composition and method of fabrication	[NASA-CASE-NFO-13120-1]	c27 N76-15311	Real time analysis of voiced sounds	[NASA-CASE-NFO-13465-1]	c32 N76-31372
Dichroic plate	[NASA-CASE-NFO-13506-1]	c35 N76-15435	Ultra stable frequency distribution system	[NASA-CASE-NFO-13836-1]	c32 N76-31373
Control for nuclear thermionic power source	[NASA-CASE-NFO-13114-2]	c44 N76-15573	High resolution Fourier interferometer-spectrophotopolarimeter	[NASA-CASE-NFO-13604-1]	c35 N76-31490
Magnetometer using superconducting rotating body	[NASA-CASE-NFO-13388-1]	c35 N76-16390	Reflected-wave maser	[NASA-CASE-NFO-13490-1]	c36 N76-31512
Scan converting video tape recorder	[NASA-CASE-NFO-10166-2]	c35 N76-16391	Independent gain and bandwidth control of a traveling wave maser	[NASA-CASE-NFO-13801-1]	c36 N76-31514
Hydrogen rich gas generator	[NASA-CASE-NFO-13342-1]	c37 N76-16446	Method of making hollow elastomeric bodies	[NASA-CASE-NFO-13535-1]	c37 N76-31524
A machine for use in scintillating fatigue life for a plurality of elastomeric specimens	[NASA-CASE-NFO-13731-1]	c39 N76-17427	Solar cell grid patterns	[NASA-CASE-NFO-13087-2]	c44 N76-31666
Automated system for identifying traces of organic chemical compounds in aqueous solutions	[NASA-CASE-NFO-13063-1]	c25 N76-18245	Furlable antenna	[NASA-CASE-NFO-13553-1]	c33 N76-32457
Analog to digital converter	[NASA-CASE-NFO-13385-1]	c33 N76-18345	Annular arc accelerator shock tube	[NASA-CASE-NFO-13528-1]	c09 N77-10071
Sampler of gas borne particles	[NASA-CASE-NFO-13396-1]	c35 N76-18401	Cryostat system for temperatures on the order of 2 deg K or less	[NASA-CASE-NFO-13459-1]	c31 N77-10229
Stark-effect modulation of CO2 laser with NH2D	[NASA-CASE-NFO-11945-1]	c36 N76-18427	The dc-to-dc converters employing staggered-phase power switches with two-loop control	[NASA-CASE-NFO-13512-1]	c33 N77-10428
Diffused waveguiding capillary tube with distributed feedback for a gas laser	[NASA-CASE-NFO-13544-1]	c36 N76-18428	Ion and electron detector for use in an ICR spectrometer	[NASA-CASE-NFO-13479-1]	c35 N77-10492
System for minimizing internal combustion engine pollution emission	[NASA-CASE-NFO-13402-1]	c37 N76-18457	Hydrogen-rich gas generator	[NASA-CASE-NFO-13560-1]	c44 N77-10636
Hydrogen-bicrine secondary battery	[NASA-CASE-NFO-13237-1]	c44 N76-18641	Thin conformal antenna array for microwave power conversion	[NASA-CASE-NFO-13886-1]	c32 N77-11269
Hydrogen-rich gas generator	[NASA-CASE-NFO-13464-1]	c44 N76-18642	Differential optoacoustic absorption detector	[NASA-CASE-NFO-13759-1]	c35 N77-11363
Zinc-halide battery with molten electrolyte	[NASA-CASE-NFO-11961-1]	c44 N76-18643	Hydrogen-fueled engine	[NASA-CASE-NFO-13763-1]	c37 N77-11398
Priority interrupt system	[NASA-CASE-NFO-13067-1]	c60 N76-18800	Space communication system for compressed data with a concatenated Reed-Solomon-Viterbi coding channel	[NASA-CASE-NFO-13545-1]	c32 N77-12240
Acoustic energy shaping	[NASA-CASE-NFO-13802-1]	c71 N76-18886	Computer interface system	[NASA-CASE-NFO-13428-1]	c60 N77-12721
Miniature muscle displacement transducer	[NASA-CASE-NFO-13519-1]	c33 N76-19338	High temperature oxidation resistant cermet composites	[NASA-CASE-NFO-13666-1]	c27 N77-13217
Zero torque gear head wrench	[NASA-CASE-NFO-13059-1]	c37 N76-20480	Frequency discriminator and phase detector circuit	[NASA-CASE-NFO-11515-1]	c33 N77-13315
Method and apparatus for measurement of trap density and energy distribution in dielectric films	[NASA-CASE-NFO-13443-1]	c76 N76-20994			
Indicator providing continuous indication of the presence of a specific pollutant in air	[NASA-CASE-NFO-13474-1]	c45 N76-21742			

Mass spectrometer with magnetic pole pieces providing the magnetic fields for both the magnetic sector and an ion-type vacuum pump
[NASA-CASE-NFO-12663-1] c35 N77-14406

Thermocouple installation
[NASA-CASE-NFO-13540-1] c35 N77-14409

Method and apparatus for background signal reduction in cfto-acoustic absorption measurement
[NASA-CASE-NFO-13683-1] c35 N77-14411

Multistatic refrigeration system
[NASA-CASE-NFO-13839-1] c31 N77-15219

Electroexplosive device
[NASA-CASE-NFO-13858-1] c28 N77-17258

Surface roughness measuring system
[NASA-CASE-NFO-13862-1] c32 N77-17325

Swept group delay measurement
[NASA-CASE-NFO-13909-1] c33 N77-17358

Overload protection system for power inverter
[NASA-CASE-NFO-13872-1] c33 N77-17359

Improved nozzle for use with abrasive and/or corrosive materials
[NASA-CASE-NFO-13823-1] c37 N77-17466

Process for purification of waste water produced by a Kraft process pulp and paper mill
[NASA-CASE-NFO-13847-2] c85 N77-17949

Nuclear thermionic converter
[NASA-CASE-NFO-13121-1] c73 N77-18891

Passive intrusion detection system
[NASA-CASE-NFO-13804-1] c35 N77-19390

Charge transfer reaction laser with preionization means
[NASA-CASE-NFO-13945-1] c36 N77-19418

A non-tracking solar energy collector system
[NASA-CASE-NFO-13813-1] c44 N77-19579

Dual membrane, hollow fiber fuel cell
[NASA-CASE-NFO-13732-1] c44 N77-19581

Automated clinical system for chromocytome analysis
[NASA-CASE-NFO-13913-1] c52 N77-19750

Multiple rate digital command detection system with range clean-up capability
[NASA-CASE-NFO-13753-1] c32 N77-20289

Solar energy collection system
[NASA-CASE-NFO-13579-2] c44 N77-20565

Low cost solar energy collection system
[NASA-CASE-NFO-13579-3] c44 N77-20566

Charge storage diode modulators and demodulators
[NASA-CASE-NFO-10189-1] c33 N77-21314

Compact, high intensity arc lamp with internal magnetic field producing means
[NASA-CASE-NFO-11510-1] c33 N77-21315

Depressurization of arc lamps
[NASA-CASE-NFO-16790-1] c33 N77-21316

Electromagnetic transducer recording head having a laminated core section and tapered gap
[NASA-CASE-NFO-10711-1] c35 N77-21392

Cryogenic liquid sensor
[NASA-CASE-NFO-10619-1] c35 N77-21393

Uniform variable light source
[NASA-CASE-NFO-11429-1] c74 N77-21941

Durable antistatic coating for polymethylmethacrylate
[NASA-CASE-NFO-13867-1] c27 N77-22257

Arc control in compact arc lamps
[NASA-CASE-NFO-10870-1] c33 N77-22386

Adjustable chamfering tool
[NASA-CASE-NFO-10857-1] c37 N77-22478

Hydraulic drain means for servo-systems
[NASA-CASE-NFO-10316-1] c37 N77-22479

Automated multi-level vehicle parking system
[NASA-CASE-NFO-13058-1] c37 N77-22480

Sun direction detection system
[NASA-CASE-NFO-13722-1] c74 N77-22951

Reflex feed system for dual-frequency antenna
[NASA-CASE-NFO-14022-1] c32 N77-24338

Phase conjugation method and apparatus for an active retrodirective antenna array
[NASA-CASE-NFO-13641-1] c32 N77-24340

Digital derodulator-correlator
[NASA-CASE-NFO-13982-1] c32 N77-24341

Selective image area control of X-ray film exposure density
[NASA-CASE-NFO-13808-1] c35 N77-24456

Stabilization of He2(a- Σ Sigman(+)) molecules in liquid helium by optical pumping for vacuum UV laser
[NASA-CASE-NFO-13993-1] c36 N77-24468

Double discharge metal vapor laser with metal halide as a lasing

[NASA-CASE-NFO-13448-2] c36 N77-24469

Sun tracking solar energy collector
[NASA-CASE-NFO-13921-1] c44 N77-24590

Digital data reformatter/deserializer
[NASA-CASE-NFO-13676-1] c60 N77-24781

Nitramine propellants
[NASA-CASE-NFO-14103-1] c28 N77-25346

Internal combustion engine with electrostatic discharging fuels
[NASA-CASE-NFO-13798-1] c37 N77-25535

Isotope separation using metallic vapor lasers
[NASA-CASE-NFO-13550-1] c36 N77-26477

Distributed feedback acoustic surface wave oscillator
[NASA-CASE-NFO-13673-1] c71 N77-26919

Penetrometer
[NASA-CASE-NFO-11103-1] c35 N77-27367

Polymeric electrolytic hygrometer
[NASA-CASE-NFO-13948-1] c35 N77-28470

Lightweight reflector assembly
[NASA-CASE-NFO-13707-1] c74 N77-28933

Aldehyde-containing urea-absorbing polysaccharides
[NASA-CASE-NFO-13620-1] c27 N77-30236

Phase substitution of spare converter for a failed one of parallel phase staggered converters
[NASA-CASE-NFO-13812-1] c33 N77-30365

A thermal energy transformer
[NASA-CASE-NFO-14058-1] c44 N77-30616

Oil and fat absorbing polymers
[NASA-CASE-NFO-11609-2] c27 N77-31308

Combustion engine
[NASA-CASE-NFO-13671-1] c37 N77-31497

An improved vehicular impact absorption system
[NASA-CASE-NFO-14014-1] c37 N77-31501

Apparatus for photon excited catalysis
[NASA-CASE-NFO-13566-1] c25 N77-32255

Strong thin membrane structure
[NASA-CASE-NFO-14021-1] c27 N77-32313

Charge-coupled device data processor for an airborne imaging radar system
[NASA-CASE-NFO-13587-1] c32 N77-32342

Circuit for automatic load sharing in parallel converter modules
[NASA-CASE-NFO-14056-1] c33 N77-32402

Direct reading inductance meter
[NASA-CASE-NFO-13792-1] c35 N77-32455

Solar photolysis of water
[NASA-CASE-NFO-13675-1] c44 N77-32580

Low to high temperature energy conversion system
[NASA-CASE-NFO-13510-1] c44 N77-32581

Solar energy collection system
[NASA-CASE-NFO-13810-1] c44 N77-32582

Three-dimensional tracking solar energy concentrator and method for making same
[NASA-CASE-NFO-13736-1] c44 N77-32583

Compact artificial hand
[NASA-CASE-NFO-13906-1] c54 N77-32723

K

KELSEY-HAYES CO., BOMULUS, MICH.

Variable thrust ion engine utilizing thermally decomposable solid fuel Patent
[NASA-CASE-NXP-00923] c28 N70-36802

KELTRC INDUSTRIES, INC., ALEXANDRIA, VA.

Unfurlable structure including coiled strips thrust launched upon tension release Patent
[NASA-CASE-HQN-00937] c07 N71-28979

KINEMATIC CORP., PASADENA, CALIF.

Excitation and detection circuitry for a flux responsive magnetic head
[NASA-CASE-NXP-04183] c09 N69-24329

Tape guidance system and apparatus for the provision thereof Patent
[NASA-CASE-NXP-09453] c08 N71-19420

Incremental tape recorder and data rate converter Patent
[NASA-CASE-NXP-02778] c08 N71-22710

KOLLSMAN INSTRUMENT CORP., ELMHURST, N. Y.
Wide angle long eye relief eyepiece Patent
[NASA-CASE-XMS-06056-1] c23 N71-24857

KOLLSMAN INSTRUMENT CORP., STOSSET, N. Y.
Digital modulator and demodulator Patent
[NASA-CASE-ERC-10041] c08 N71-29138

Ritchey-Chretien Telescope
[NASA-CASE-GSC-11487-1] c74 N73-30393

KONIGSBERG INSTRUMENTS, INC., PASADENA, CALIF.
Accelerometer telemetry system

[NASA-CASE-ARC-10849-1] c17 N76-29347
KORAD COFF., NEW YORK.
 Laser apparatus for removing material from
 rotating objects Patent
 [NASA-CASE-MFS-11279] c16 N71-20400

L

LIFE SYSTEMS, INC., CLEVELAND, OHIO.
 Iodine generator for reclaimed water purification
 [NASA-CASE-MSC-14632-1] c54 N75-25594
LING-TENCO-VOUGHT, INC., DALLAS, TEX.
 Latch/ejector unit Patent
 [NASA-CASE-XIA-03538] c15 N71-24897
LITTLE (ARTHUR D.), INC., CAMBRIDGE, MASS.
 Apparatus for measuring thermal conductivity
 Patent
 [NASA-CASE-XGS-01052] c14 N71-15992
 Non-flammable elastomeric fiber from a
 fluorinated elastomer and containing an
 halogenated flame retardant
 [NASA-CASE-MSC-14331-1] c27 N76-24405
 Flame retardant elastomeric compositions
 [NASA-CASE-MSC-14331-2] c27 N76-24408
 Flame retardant elastomeric compositions
 [NASA-CASE-MSC-14331-3] c27 N76-24409
LITTON INDUSTRIES, BEVERLY HILLS, CALIF.
 Life support system
 [NASA-CASE-MSC-12411-1] c05 N72-20096
LITTON INDUSTRIES, COLLEGE PARK, MD.
 Shrink-fit gas valve Patent
 [NASA-CASE-XGS-00587] c15 N70-35087
LITTON INDUSTRIES, SAN CARLOS, CALIF.
 Very high intensity light source using a cathode
 ray tube
 [NASA-CASE-INP-01296] c33 N75-27250
LITTON SYSTEMS, INC., MINNEAPOLIS, MINN.
 Apparatus for sampling particulates in gases
 [NASA-CASE-BQN-10037-1] c14 N73-27376
LOCKHEED AIRCRAFT CORP., BURBANK, CALIF.
 Aerodynamic protection for space flight vehicles
 Patent
 [NASA-CASE-INP-02507] c31 N71-17679
LOCKHEED-CALIFORNIA CO., BURBANK.
 Absorptive splitter for closely spaced
 supersonic engine air inlets Patent
 [NASA-CASE-XIA-02865] c28 N71-15563
 Multistage aerospace craft
 [NASA-CASE-INP-02263] c05 N74-10907
LOCKHEED ELECTRONICS CO., HOUSTON, TEX.
 Television signal scan rate conversion system
 Patent
 [NASA-CASE-XMS-07168] c07 N71-11300
 Burst synchronization detection system Patent
 [NASA-CASE-XMS-05605-1] c10 N71-19468
 Automatic signal range selector for metering
 devices Patent
 [NASA-CASE-XMS-06497] c14 N71-26244
 Monostable multivibrator with complementary NOR
 gates Patent
 [NASA-CASE-MSC-13492-1] c10 N71-28860
 Ultraportable calibrated light source
 [NASA-CASE-MSC-12293-1] c14 N72-27411
 Data storage, image tube type
 [NASA-CASE-MSC-14053-1] c60 N74-12888
 Differential phase shift keyed communication
 system
 [NASA-CASE-MSC-14065-1] c32 N74-26654
 Differential phase shift keyed signal resolver
 [NASA-CASE-MSC-14066-1] c33 N74-27705
 Method and apparatus for decoding compatible
 convolutional codes
 [NASA-CASE-MSC-14070-1] c32 N74-32598
 Pulse stretcher for narrow pulses
 [NASA-CASE-MSC-14130-1] c33 N74-32711
 Peak holding circuit for extremely narrow pulses
 [NASA-CASE-MSC-14129-1] c33 N75-18479
 Random pulse generator
 [NASA-CASE-MSC-14131-1] c33 N75-19515
 Digital transmitter for data bus communications
 system
 [NASA-CASE-MSC-14558-1] c32 N75-21486
 Low distortion receiver for bi-level baseband
 FCM waveforms
 [NASA-CASE-MSC-14557-1] c32 N76-16249
 Dual frequency circularly polarized microwave
 integrated antenna
 [NASA-CASE-MSC-16100-1] c32 N77-15233

System for producing chroma signals *
 [NASA-CASE-MSC-14683-1] c74 N77-18893
 Phase array antenna control
 [NASA-CASE-MSC-14939-1] c33 N77-19320
LOCKHEED MISSILES AND SPACE CO., SUNNYVALE, CALIF.
 Device for handling heavy loads
 [NASA-CASE-INP-04969] c11 N65-27466
 Transient heat transfer gauge Patent
 [NASA-CASE-INP-09802] c33 N71-15641
 Dual solid cryogenics for spacecraft refrigeration
 Patent
 [NASA-CASE-GSC-10188-1] c23 N71-24725
 Apparatus for detecting the amount of material
 in a resonant cavity container Patent
 [NASA-CASE-INP-02500] c18 N71-27397
 Emergency earth orbital escape device
 [NASA-CASE-MSC-13281] c31 N72-18859
 Solar energy powered heliotrope
 [NASA-CASE-GSC-10945-1] c21 N72-31637
 Coaxial inverted geometry transistor having
 buried emitter
 [NASA-CASE-ABC-10330-1] c09 N73-32112
 Whole body measurement systems
 [NASA-CASE-MSC-13972-1] c52 N74-10575
 Four phase logic systems
 [NASA-CASE-MSC-14240-1] c33 N75-14957
 Strain arrestor plate for fused silica tile
 [NASA-CASE-MSC-14182-1] c27 N76-14264
 Medical subject monitoring systems
 [NASA-CASE-MSC-14180-1] c52 N76-14757
 Two-component ceramic coating for silica
 insulation
 [NASA-CASE-MSC-14270-1] c27 N76-22377
 Optical alignment device
 [NASA-CASE-ABC-10932-1] c74 N76-22993
 A process of forming catalytic surfaces for
 oxidation reactions
 [NASA-CASE-MSC-14831-1] c25 N76-23387
 Three-component ceramic coating for silica
 insulation
 [NASA-CASE-MSC-14270-2] c27 N76-23426
 Partial polarizer filter
 [NASA-CASE-GSC-12225-1] c74 N77-30935
LOCKHEED PROPULSION CO., REDLANDS, CALIF.
 Propellant grain for rocket motors Patent
 [NASA-CASE-XGS-03556] c27 N70-35534
LTV AEROSPACE CORP., DALLAS, TEX.
 Method of fluxless brazing and diffusion bonding
 of aluminum containing components
 [NASA-CASE-MSC-14435-1] c37 N76-18455

M

MACOM-BUST CO., LEXINGTON, KY.
 Stretcher Patent
 [NASA-CASE-INP-06589] c05 N71-23159
MARLIN-ROCKWELL CORP., JAMESTOWN, N. Y.
 Drilled ball bearing with a one piece
 anti-tipping cage assembly
 [NASA-CASE-LEW-11925-1] c37 N75-31446
MARQUARDT CORP., VAN NUYS, CALIF.
 Fuel injection pump for internal combustion
 engines Patent
 [NASA-CASE-MSC-12139-1] c28 N71-14058
 Multislit film cooled pyrolytic graphite rocket
 nozzle Patent
 [NASA-CASE-INP-04389] c28 N71-20942
 Tube sealing device Patent
 [NASA-CASE-MFO-10431] c15 N71-29132
MARTIN MARIETTA AEROSPACE, DENVER, COLO.
 Method and apparatus for tensile testing of
 metal foil
 [NASA-CASE-IAR-10208-1] c35 N76-18400
MARTIN MARIETTA CORP., BALTIMORE, MD.
 Landing gear Patent
 [NASA-CASE-XMI-01174] c02 N70-41589
 Emergency escape system Patent
 [NASA-CASE-IKS-02342] c05 N71-11199
 Device to prevent clogging in a hopper
 [NASA-CASE-IAR-10961-1] c15 N72-12496
MARTIN MARIETTA CORP., DENVER, COLO.
 Flexible/rigidifiable cable assembly
 [NASA-CASE-MSC-13512-1] c15 N72-22485
 Derivation of a tangent function using an
 integrated circuit four-quadrant multiplier
 [NASA-CASE-MSC-13907-1] c10 N73-26230
 Low distortion automatic phase control circuit
 [NASA-CASE-MFS-21671-1] c33 N74-22885

Variable ratio sized-mode bilateral master-slave control system for shuttle remote manipulator system
[NASA-CASE-MSC-14245-1] c18 N75-27041

Varying density composite structure
[NASA-CASE-LAR-11181-1] c39 N75-31479

Filter regeneration systems
[NASA-CASE-MSC-14273-1] c34 N75-33342

Turnstile and flared cone UHF antenna
[NASA-CASE-LAR-10970-1] c33 N76-14372

Method and apparatus for fluffing, separating, and clearing fibers
[NASA-CASE-LAR-11224-1] c37 N76-18456

Extreme temperature thermal control coating
[NASA-CASE-LAR-11756-1] c24 N76-26284

Hearing aid malfunction detection system
[NASA-CASE-MSC-14916-1] c33 N77-13335

Positive isolation disconnect
[NASA-CASE-MSC-16043-1] c37 N77-15397

MARYLAND UNIV., COLLEGE PARK.
Method and apparatus for optical modulating a light signal Patent
[NASA-CASE-GSC-10216-1] c23 N71-26722

MASSACHUSETTS INST. OF TECH., CAMBRIDGE.
Pretreatment method for anti-wettable materials
[NASA-CASE-XMS-03537] c15 N69-21471

Hydraulic drive mechanism Patent
[NASA-CASE-XMS-03252] c15 N71-10658

Electronic amplifier with power supply switching Patent
[NASA-CASE-XMS-00945] c09 N71-10798

Method and apparatus for stabilizing a gaseous optical maser Patent
[NASA-CASE-XGS-03644] c16 N71-18614

Power supply Patent
[NASA-CASE-XMS-02159] c10 N71-22961

Optical frequency waveguide Patent
[NASA-CASE-HQN-10541-1] c07 N71-26291

Laser machining apparatus Patent
[NASA-CASE-HQN-10541-2] c15 N71-27135

Optical frequency waveguide and transmission system Patent
[NASA-CASE-HQN-10541-4] c16 N71-27183

Optical frequency waveguide and transmission system
[NASA-CASE-HQN-10541-3] c23 N72-23695

Display research collision warning system
[NASA-CASE-HQN-10703] c21 N73-13643

Transparent switchboard
[NASA-CASE-MSC-13746-1] c10 N73-32143

Vapor deposition apparatus
[NASA-CASE-HQN-10462] c25 N75-29192

Fault tolerant clock apparatus utilizing a controlled minority of clock elements
[NASA-CASE-MSC-12531-1] c35 N75-30504

MCDONNELL AIRCRAFT CO., ST. LOUIS, MO.
Method for making a heat insulating and ablative structure
[NASA-CASE-XMS-01108] c15 N69-24322

Heat flux sensor assembly
[NASA-CASE-XMS-05909-1] c14 N69-27459

Apparatus for purging systems handling toxic, corrosive, noxious and other fluids Patent
[NASA-CASE-XMS-01905] c12 N71-21089

Power supply circuit Patent
[NASA-CASE-XMS-00913] c10 N71-23543

Multiple circuit protector device
[NASA-CASE-XMS-02744] c33 N75-27249

Apparatus for welding sheet material
[NASA-CASE-XMS-01330] c37 N75-27376

MCDONNELL-DOUGLAS AERONAUTICS CO., HUNTINGTON BEACH, CALIF.
Heat transfer device
[NASA-CASE-MFS-22938-1] c34 N76-18374

MCDONNELL-DOUGLAS AERONAUTICS CO., SANTA MONICA, CALIF.
New polymers of perfluorobutadiene and method of manufacture Patent application
[NASA-CASE-NPO-10863] c06 N70-11251

Method of polymerizing perfluorobutadiene Patent application
[NASA-CASE-NPO-10447] c06 N70-11252

MCDONNELL-DOUGLAS CORP., HUNTINGTON BEACH, CALIF.
Variable direction force coupler
[NASA-CASE-MFS-20317] c15 N73-13463

Potable water dispenser
[NASA-CASE-MFS-21115-1] c54 N74-12779

Metering gun for dispensing precisely measured charges of fluid
[NASA-CASE-MFS-21163-1] c54 N74-17853

Airlock
[NASA-CASE-MFS-20922-1] c18 N74-22136

Device for monitoring a change in mass in varying gravimetric environments
[NASA-CASE-MFS-21556-1] c35 N74-26945

Thrust-isolating mounting
[NASA-CASE-MFS-21680-1] c18 N74-27397

Device for measuring tensile forces
[NASA-CASE-MFS-21728-1] c35 N74-27865

Flame detector operable in presence of proton radiation
[NASA-CASE-MFS-21577-1] c19 N74-29410

Phase-locked servo system
[NASA-CASE-MFS-22073-1] c33 N75-13139

Vacuum leak detector
[NASA-CASE-LAR-11237-1] c35 N75-19612

Meter for use in detecting tension in straps having predetermined elastic characteristics
[NASA-CASE-MFS-22189-1] c35 N75-19615

Device for use in loading tension members
[NASA-CASE-MFS-21488-1] c14 N75-24794

MCDONNELL-DOUGLAS CORP., NEWPORT BEACH, CALIF.
Method of making membranes
[NASA-CASE-XNF-04264] c03 N69-21337

MCDONNELL-DOUGLAS CORP., SANTA MONICA, CALIF.
Rocket nozzle test method Patent
[NASA-CASE-NFO-10311] c31 N71-15643

Reaction of fluorine with polyperfluoropolyenes
[NASA-CASE-NFO-10862] c06 N72-22107

Polymers of perfluorobutadiene and method of manufacture
[NASA-CASE-NFO-10863-2] c06 N72-25152

Electrolytic cell structure
[NASA-CASE-LAR-11042-1] c33 N75-27252

Prevention of hydrogen embrittlement of high strength steel by hydrazine compositions
[NASA-CASE-NFO-12122-1] c24 N76-14203

Utilization of oxygen difluoride for syntheses of fluoropolymers
[NASA-CASE-NFO-12061-1] c27 N76-16228

MCDONNELL-DOUGLAS CORP., ST. LOUIS, MO.
Thermally conductive polymers
[NASA-CASE-GSC-11304-1] c06 N72-21105

MEDICAL SCIENCES RESEARCH FOUNDATION, SAN FRANCISCO, CALIF.
Reduction of blood serum cholesterol
[NASA-CASE-NFO-12119-1] c52 N75-15270

MELLON INST., PITTSBURGH, PA.
Instrument for measuring torsional creep and recovery Patent
[NASA-CASE-XIE-01481] c14 N71-10781

HELPER, INC., FALLS CHURCH, VA.
Television simulation for aircraft and space flight Patent
[NASA-CASE-XPR-03107] c09 N71-19449

Compact solar still Patent
[NASA-CASE-XMS-04533] c15 N71-23086

HETCON, INC., SALEM, MASS.
Tuning arrangement for an electron discharge device or the like Patent
[NASA-CASE-XNP-09771] c09 N71-24841

METHODIST HOSPITAL, HOUSTON, TEX.
Snap-in compressible biomedical electrode
[NASA-CASE-MSC-14623-1] c52 N77-28717

MICROWAVE ELECTRONICS CORP., PALO ALTO, CALIF.
Folded traveling wave maser structure Patent
[NASA-CASE-XNF-05219] c16 N71-15550

Superconducting magnet Patent
[NASA-CASE-XNP-06503] c23 N71-29049

MICROWAVE RESEARCH CORP., NORTH ANDOVER, MASS.
Highly efficient antenna system using a corrugated horn and scanning hyperbolic reflector
[NASA-CASE-NFO-13568-1] c32 N76-21365

MIDWEST RESEARCH INST., KANSAS CITY, MO.
Preparation of ordered polyarylenesiloxane/polymers
[NASA-CASE-XNP-10753] c06 N71-11237

Inorganic solid film lubricants Patent
[NASA-CASE-XNP-03988] c15 N71-21403

Fluorinated esters of polycarboxylic acids
[NASA-CASE-MFS-21040-1] c06 N73-30098

MILLIKEN (D. B.) CO., ALCADIA, CALIF.
Film feed camera having a detent means Patent
[NASA-CASE-LAR-10686] c14 N71-28935

MINEAPOLIS-HONEYWELL REGULATOR CO., MINN.
Microelectronic module package Patent
[NASA-CASE-XMS-02182] c10 N71-28783

SOURCE INDEX

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.

MODEEN MACHINE AND TOOL CO., NEWPORT NEWS, VA.

Means for accommodating large overstrain in lead wires
[NASA-CASE-LAR-10166-1] c33 N74-22865

MONSANTO RESEARCH CORP., DAYTON, OHIO.

Perfluoro alkylene dioxy-bis-(4-phthalic anhydrides and oxy-bis-(perfluoralkyleneoxyphthalic anhydrides
[NASA-CASE-HFS-22356-1] c23 N75-30256

Polyimides of ether-linked aryl tetracarboxylic dianhydrides
[NASA-CASE-HFS-22355-1] c23 N76-15268

MOTOROLA, INC., PHOENIX, ARIZ.

Automatic frequency discriminators and control for a phase-lock loop providing frequency preset capabilities Patent
[NASA-CASE-MFP-08665] c10 N71-19467

MOTOROLA, INC., SCOTTSDALE, ARIZ.

Sealed cabinetry Patent
[NASA-CASE-HSC-12168-1] c09 N71-18600

Digital frequency discriminator Patent
[NASA-CASE-HFS-14322] c08 N71-18692

Phase modulator Patent
[NASA-CASE-HSC-13201-1] c07 N71-28429

Capacitance multiplier and filter synthesizing network
[NASA-CASE-WFO-11948-1] c33 N74-32712

Quadrature demodulation
[NASA-CASE-GSC-12137-1] c32 N77-27272

N

NATIONAL ACADEMY OF SCIENCES - NATIONAL RESEARCH COUNCIL, WASHINGTON, D. C.

Gyrator employing field effect transistors
[NASA-CASE-HFS-21433] c09 N73-20232

Suppression of flutter
[NASA-CASE-LAR-10682-1] c02 N73-26004

Optical data processing using parabolic mirror segments
[NASA-CASE-GSC-11296-1] c23 N73-30666

Power supply for carbon dioxide lasers
[NASA-CASE-GSC-11222-1] c16 N73-32391

High field CdS detector for infrared radiation
[NASA-CASE-LAR-11027-1] c35 N74-18088

Holography utilizing surface plasmon resonances
[NASA-CASE-HFS-22040-1] c35 N74-26946

Stagnation pressure probe
[NASA-CASE-LAR-11139-1] c35 N74-32878

Integrated P-channel MOS gyrator
[NASA-CASE-HFS-22343-1] c33 N74-34638

Automated analysis of oxidative metabolites
[NASA-CASE-ARC-10469-1] c25 N75-12086

Method of preparing water purification membranes
[NASA-CASE-ARC-10643-1] c25 N75-12087

Method of forming aperture plate for electron microscope
[NASA-CASE-ARC-10448-2] c74 N75-12732

Dually mode locked Nd:YAG laser
[NASA-CASE-GSC-11746-1] c36 N75-19654

Anti-gravity device
[NASA-CASE-HFS-22758-1] c70 N75-26789

Impact position detector for outer space particles
[NASA-CASE-GSC-11829-1] c35 N75-27331

Integrable power gyrator
[NASA-CASE-HFS-22342-1] c33 N75-30428

Two stage light gas-plasma projectile accelerator
[NASA-CASE-HFS-22287-1] c75 N76-14931

Micrometeoroid velocity and trajectory analyzer
[NASA-CASE-GSC-11892-1] c35 N76-15433

Method and apparatus for splitting a beam of energy
[NASA-CASE-GSC-12083-1] c36 N76-15451

Moving particle composition analyzer
[NASA-CASE-GSC-11889-1] c35 N76-16393

Self-energized plasma compressor
[NASA-CASE-HFS-22145-2] c75 N76-17951

Charge injection method and apparatus of producing large area electrets
[NASA-CASE-HFS-22186-1] c33 N76-23483

Readout electrode assembly for measuring biological impedance
[NASA-CASE-ARC-10816-1] c35 N76-24525

Electron microscope aperture system
[NASA-CASE-ARC-10448-3] c35 N77-14408

Method for making a hot wire anemometer and product thereof
[NASA-CASE-ARC-10900-1] c35 N77-24454

A cantilever mounted resilient pad gas bearing
[NASA-CASE-LFW-12569-1] c37 N77-24496

Length controlled stabilized mode-lock Nd:YAG laser
[NASA-CASE-GSC-11571-1] c36 N77-25499

Method of growing composites of the type exhibiting the Soret effect
[NASA-CASE-HFS-22926-1] c24 N77-27187

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, WASHINGTON, D. C.

Optical spin compensator
[NASA-CASE-XGS-02401] c14 N65-27485

Waveguide mixer
[NASA-CASE-ERC-10179] c07 N72-20141

Semiconductor-ferroelectric memory device
[NASA-CASE-ERC-10307] c08 N72-21198

Shielded cathode mode bulk effect devices
[NASA-CASE-ERC-10119] c26 N72-21701

Fabrication of single crystal film semiconductor devices
[NASA-CASE-ERC-10222] c09 N72-22199

Two color horizon sensor
[NASA-CASE-ERC-10174] c14 N72-25409

Ultraviolet atomic emission detector
[NASA-CASE-BQN-10756-1] c14 N72-25428

Optical pump and driver system for lasers
[NASA-CASE-ERC-10283] c16 N72-25485

Clear air turbulence detector
[NASA-CASE-ERC-10081] c14 N72-28437

Head-up attitude display
[NASA-CASE-ERC-10392] c21 N73-14692

System for indicating direction of intruder aircraft
[NASA-CASE-ERC-10226-1] c14 N73-16483

Aircraft control system
[NASA-CASE-ERC-10439] c02 N73-19004

Display system
[NASA-CASE-ERC-10350] c14 N73-20474

Method and apparatus for measuring solar activity and atmospheric radiation effects
[NASA-CASE-ERC-10276] c14 N73-26432

Doppler shift system
[NASA-CASE-BQN-10740-1] c72 N74-19310

Auditory display for the blind
[NASA-CASE-BQN-10832-1] c71 N74-21014

Laser system with an antiresonant optical ring
[NASA-CASE-BQN-10844-1] c36 N75-19653

Nonequilibrium radiation nuclear reactor
[NASA-CASE-BQN-10841-1] c73 N75-22108

Physical correction filter for improving the optical quality of an image
[NASA-CASE-BQN-10542-1] c74 N75-25706

Folding structure fabricated of rigid panels
[NASA-CASE-XHC-02146] c18 N75-27040

Traveling wave solid state amplifier utilizing a semiconductor with negative differential mobility
[NASA-CASE-BQN-10069] c33 N75-27251

Vapor deposition apparatus
[NASA-CASE-BQN-10462] c25 N75-29192

System and method for tracking a signal source
[NASA-CASE-BQN-10880-1] c32 N75-30385

Resistive anode image converter
[NASA-CASE-BQN-10876-1] c33 N76-27473

Rechargeable battery which combats shape change of the zinc anode
[NASA-CASE-BQN-10862-1] c44 N76-29699

Safety flywheel
[NASA-CASE-BQN-10888-1] c37 N77-22484

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. AMES RESEARCH CENTER, MOFFETT FIELD, CALIF.

Nonmagnetic thermal motor for a magnetometer
[NASA-CASE-XAR-03786] c09 N69-21313

Balanced bellows spirometer
[NASA-CASE-XAR-01547] c05 N69-21473

Cryogenic apparatus for measuring the intensity of magnetic fields
[NASA-CASE-XAC-02407] c14 N69-27423

Variable stiffness polymeric damper
[NASA-CASE-XAC-11225] c14 N69-27486

Shock-layer radiation measurement
[NASA-CASE-XAC-02970] c14 N69-39896

Protective circuit of the spark gap type
[NASA-CASE-XAC-08981] c09 N69-39897

Apparatus for coupling a plurality of ungrounded circuits to a grounded circuit Patent
[NASA-CASE-XAC-00086] c09 N70-33182

Two-plane balance Patent
[NASA-CASE-XAC-00073] c14 N70-34813

Centrifuge mounted motion simulator Patent		Attitude controls for VTOL aircraft Patent	
[NASA-CASI-XAC-00399]	c11 N70-34815	[NASA-CASE-XAC-08972]	c02 N71-20570
Differential pressure cell Patent		Electric arc apparatus Patent	
[NASA-CASI-XAC-00042]	c14 N70-34816	[NASA-CASI-XAC-01677]	c09 N71-20816
High-temperature, high-pressure spherical segment valve Patent		Inertia diaphragm pressure transducer Patent	
[NASA-CASE-XAC-00074]	c15 N70-34817	[NASA-CASE-XAC-02981]	c14 N71-21072
Magnetically centered liquid column float Patent		Stirring apparatus for plural test tubes Patent	
[NASA-CASI-XAC-00030]	c14 N70-34820	[NASA-CASE-XAC-06956]	c15 N71-21177
Propeller blade loading control Patent		Exposure system for animals Patent	
[NASA-CASE-XAC-00139]	c02 N70-34856	[NASA-CASE-XAC-05333]	c11 N71-22875
Temperature compensated solid state differential amplifier Patent		Vibrating element electrometer with output signal magnified over input signal by a function of the mechanical Q of the vibrating element Patent	
[NASA-CASE-XAC-00435]	c09 N70-35440	[NASA-CASE-XAC-02807]	c09 N71-23021
High speed low level electrical stepping switch Patent		Ball current measuring apparatus having a series resistor for temperature compensation Patent	
[NASA-CASE-XAC-00060]	c09 N70-39915	[NASA-CASE-XAC-01662]	c14 N71-23037
Analog-to-digital conversion system Patent		Transfer valve Patent	
[NASA-CASE-XAC-00404]	c08 N70-40125	[NASA-CASE-XAC-01158]	c15 N71-23051
Null-type vacuum microbalance Patent		Hard space suit Patent	
[NASA-CASE-XAC-00472]	c15 N70-40180	[NASA-CASE-XAC-07043]	c05 N71-23161
Thermo-protective device for balances Patent		Method and apparatus for continuously monitoring blood oxygenation, blood pressure, pulse rate and the pressure pulse curve utilizing an ear oximeter as transducer Patent	
[NASA-CASE-XAC-00648]	c14 N70-40400	[NASA-CASE-XAC-05422]	c04 N71-23185
Three-axis controller Patent		Feedback integrator with grounded capacitor Patent	
[NASA-CASE-XAC-01404]	c05 N70-41581	[NASA-CASE-XAC-10607]	c10 N71-23669
Electric arc device for heating gases Patent		Floating two force component measuring device Patent	
[NASA-CASE-XAC-00319]	c25 N70-41628	[NASA-CASE-XAC-04885]	c14 N71-23790
Dynamic sensor Patent		Control device Patent	
[NASA-CASE-XAC-02877]	c14 N70-41681	[NASA-CASE-XAC-10019]	c15 N71-23809
Universal pilot restraint suit and body support therefor Patent		Means for suppressing or attenuating bending motion of elastic bodies Patent	
[NASA-CASE-XAC-00405]	c05 N70-41819	[NASA-CASE-XAC-05632]	c32 N71-23971
Proportional controller Patent		Device for measuring pressure Patent	
[NASA-CASE-XAC-03392]	c03 N70-41954	[NASA-CASE-XAC-04458]	c14 N71-24252
Force transducer Patent		Transducer circuit and catheter transducer Patent	
[NASA-CASE-XAC-01101]	c14 N70-41957	[NASA-CASE-ARC-10132-1]	c09 N71-24597
Electrode construction Patent		Skeletal stressing method and apparatus Patent	
[NASA-CASE-ARC-10043-1]	c05 N71-11193	[NASA-CASE-ARC-10100-1]	c05 N71-24738
Telemeter adaptable for implanting in an animal Patent		Modified polyurethane foams for fuel-fire Patent	
[NASA-CASE-XAC-05706]	c05 N71-12342	[NASA-CASE-ARC-10098-1]	c06 N71-24739
Gyrator type circuit Patent		Deep space monitor communication satellite system Patent	
[NASA-CASE-XAC-10608-1]	c09 N71-12517	[NASA-CASE-XAC-06029-1]	c31 N71-24813
Ultraviolet resonance lamp Patent		Laser fluid velocity detector Patent	
[NASA-CASE-ARC-10030]	c09 N71-12521	[NASA-CASE-XAC-10770-1]	c16 N71-24828
Differential temperature transducer Patent		Transient video signal recording with expanded playback Patent	
[NASA-CASE-XAC-00812]	c14 N71-15598	[NASA-CASE-ARC-10003-1]	c09 N71-25866
Multiple circuit switch apparatus with improved pivot actuator structure Patent		Thermally cycled magnetometer Patent	
[NASA-CASE-XAC-03777]	c10 N71-15909	[NASA-CASE-XAC-03740]	c14 N71-26135
Method of planetary atmospheric investigation using a split-trajectory dual flyby mode Patent		Optical machine tool alignment indicator Patent	
[NASA-CASE-XAC-08494]	c30 N71-15990	[NASA-CASE-XAC-09489-1]	c15 N71-26673
High efficiency multivibrator Patent		Energy limiter for hydraulic actuators Patent	
[NASA-CASE-XAC-00942]	c10 N71-16042	[NASA-CASE-ARC-10131-1]	c15 N71-27754
Apparatus for measuring conductivity and velocity of plasma utilizing a plurality of sensing coils positioned in the plasma Patent		Multivibrator circuit with means to prevent false triggering from supply voltage fluctuations Patent	
[NASA-CASE-XAC-05695]	c25 N71-16073	[NASA-CASE-ARC-10137-1]	c09 N71-28468
Flight craft Patent		Locomotion and restraint aid Patent	
[NASA-CASE-XAC-02058]	c02 N71-16087	[NASA-CASE-ARC-10153]	c05 N71-28619
Three-axis finger tip controller for switches Patent		Line following servosystem Patent	
[NASA-CASE-XAC-02405]	c09 N71-16089	[NASA-CASE-XAC-00001]	c15 N71-28952
Electrostatic charged particle analyzer having deflection members shaped according to the periodic voltage applied thereto Patent		Mechanically limited, electrically operated hydraulic valve system for aircraft controls Patent	
[NASA-CASE-XAC-05506-1]	c24 N71-16095	[NASA-CASE-XAC-00048]	c02 N71-29128
Inertial reference apparatus Patent		Precision rectifier with FET switching means Patent	
[NASA-CASE-XAC-03107]	c23 N71-16098	[NASA-CASE-ARC-10101-1]	c09 N71-33109
Pastener apparatus Patent		Solar cell Patent	
[NASA-CASE-ARC-10140-1]	c15 N71-17653	[NASA-CASE-ARC-10050]	c03 N71-33409
Stabilization of gravity oriented satellites Patent		Phase shift circuit apparatus	
[NASA-CASE-XAC-01591]	c31 N71-17729	[NASA-CASE-ARC-10269-1]	c10 N72-16172
Microwave flaw detector Patent		High intensity radiant energy pulse source having means for opening shutter when light flux has reached a desired level	
[NASA-CASE-ARC-10009-1]	c15 N71-17822	[NASA-CASE-ARC-10178-1]	c09 N72-17152
Hypervelocity gun Patent		Telemetry actuated switch	
[NASA-CASE-XAC-05902]	c11 N71-18578	[NASA-CASE-ARC-10105]	c09 N72-17153
Nonlinear analog-to-digital converter Patent		Active RC networks	
[NASA-CASE-XAC-04031]	c08 N71-18594	[NASA-CASE-ARC-10020]	c10 N72-17172
Demodulator system Patent		Apparatus for automatically stabilizing the attitude of a nonguided vehicle	
[NASA-CASE-XAC-04030]	c10 N71-19472	[NASA-CASE-ARC-10134]	c30 N72-17873
Phase quadrature-plural channel data transmission system Patent			
[NASA-CASE-XAC-06302]	c08 N71-19763		
Two force component measuring device Patent			
[NASA-CASE-XAC-04886-1]	c14 N71-20439		

Gas chromatograph injection system			Overvoltage protection network		
[NASA-CASE-ARC-10344-1]	c14	N72-21433	[NASA-CASE-ARC-10197-1]	c33	N74-17929
Method and apparatus for swept-frequency impedance measurements of welds			Ultrasonic biomedical measuring and recording apparatus		
[NASA-CASE-ARC-10176-1]	c15	N72-21464	[NASA-CASE-ARC-10597-1]	c52	N74-20726
Space suit having improved waist and torso movement			Ultraviolet and thermally stable polymer compositions		
[NASA-CASE-ARC-10275-1]	c05	N72-22092	[NASA-CASE-ARC-10592-1]	c27	N74-21156
RF controlled solid state switch			High speed shutter		
[NASA-CASE-ARC-10136-1]	c09	N72-22202	[NASA-CASE-ARC-10516-1]	c70	N74-21300
Wide range dynamic pressure sensor			Bio-isolated dc operational amplifier		
[NASA-CASE-ARC-10263-1]	c14	N72-22438	[NASA-CASE-ARC-10596-1]	c33	N74-21851
Method and apparatus for measuring the damping characteristics of a structure			Programmable physiological infusion		
[NASA-CASE-ARC-10154-1]	c14	N72-22440	[NASA-CASE-ARC-10447-1]	c52	N74-22771
Magnetic position detection method and apparatus			Chromato-fluorographic drug detector		
[NASA-CASE-ARC-10179-1]	c21	N72-22619	[NASA-CASE-ARC-10633-1]	c25	N74-26947
Fluidic proportional thruster system			Intumescent composition, foamed product prepared therewith and process for making same		
[NASA-CASE-ARC-10106-1]	c28	N72-22769	[NASA-CASE-ARC-10304-2]	c27	N74-27037
Thermoelectric radiometer utilizing polymer film			Photomultiplier circuit including means for rapidly reducing the sensitivity thereof		
[NASA-CASE-ARC-10138-1]	c14	N72-24477	[NASA-CASE-ARC-10593-1]	c33	N74-27682
Polymeric vehicles as carriers for sulfonic acid salt of nitrosubstituted aromatic amines			G-load measuring and indicator apparatus		
[NASA-CASE-ARC-10325]	c06	N72-25147	[NASA-CASE-ARC-10806]	c06	N74-27872
Stereoscopic television system and apparatus			Concentric differential gearing arrangement		
[NASA-CASE-ARC-10160-1]	c23	N72-27728	[NASA-CASE-ARC-10462-1]	c37	N74-27901
Metallic intrusion detector system			Measurement of plasma temperature and density using radiation absorption		
[NASA-CASE-ARC-10265-1]	c10	N72-28240	[NASA-CASE-ARC-10598-1]	c75	N74-30156
Apparatus for ionization analysis			Abating exhaust noises in jet engines		
[NASA-CASE-ARC-10017-1]	c14	N72-29464	[NASA-CASE-ARC-10712-1]	c07	N74-33218
Nondispersive gas analyzing method and apparatus wherein radiation is serially passed through a reference and unknown gas			Solid medium thermal engine		
[NASA-CASE-ARC-10308-1]	c06	N72-31141	[NASA-CASE-ARC-10461-1]	c44	N74-33379
Two degree inverted flexure			Automated analysis of oxidative metabolites		
[NASA-CASE-ARC-10345-1]	c15	N73-12488	[NASA-CASE-ARC-10469-1]	c25	N75-12086
Intumescent paint containing nitrile rubber			Method of preparing water purification membranes		
[NASA-CASE-ARC-10196-1]	c18	N73-13562	[NASA-CASE-ARC-10643-1]	c25	N75-12087
Temperature compensated light source using a light emitting diode			Method of forming aperture plate for electron microscope		
[NASA-CASE-ARC-10467-1]	c09	N73-14214	[NASA-CASE-ARC-10448-2]	c74	N75-12732
Self-tuning bandpass filter			Integrated lift/drag controller for aircraft		
[NASA-CASE-ARC-10264-1]	c09	N73-20231	[NASA-CASE-ARC-10456-1]	c05	N75-12930
Micrometeoroid analyzer			Wind tunnel flow generation section		
[NASA-CASE-ARC-10443-1]	c14	N73-20477	[NASA-CASE-ARC-10710-1]	c09	N75-12969
Multiple pass remapping optical system			Water purification process		
[NASA-CASE-ARC-10194-1]	c23	N73-20741	[NASA-CASE-ARC-10643-2]	c51	N75-13506
Intruder detection system			Continuous Fourier transform method and apparatus		
[NASA-CASE-ARC-10097-2]	c07	N73-25160	[NASA-CASE-ARC-10466-1]	c60	N75-13539
Interferometric rotation sensor			Dual wavelength scanning Doppler velocimeter		
[NASA-CASE-ARC-10278-1]	c14	N73-25463	[NASA-CASE-ARC-10637-1]	c35	N75-16783
Dual-fuselage aircraft having yawable wing and horizontal stabilizer			Signal conditioning circuit apparatus		
[NASA-CASE-ARC-10470-1]	c02	N73-26005	[NASA-CASE-ARC-10348-1]	c33	N75-19518
Temperature controller for a fluid cooled garment			Diode-quad bridge circuit means		
[NASA-CASE-ARC-10599-1]	c05	N73-26071	[NASA-CASE-ARC-10364-3]	c33	N75-19520
Visual examination apparatus			Reversed cowl flap inlet thrust augmentor		
[NASA-CASE-ARC-10329-1]	c05	N73-26072	[NASA-CASE-ARC-10754-1]	c07	N75-24736
Intumescent composition, foamed product prepared therewith, and process for making same			Diode-quad bridge circuit means		
[NASA-CASE-ARC-10304-1]	c18	N73-26572	[NASA-CASE-ARC-10364-2]	c33	N75-25041
Infrared tunable laser			Rotary plant growth accelerating apparatus		
[NASA-CASE-ARC-10463-1]	c09	N73-32111	[NASA-CASE-ARC-10722-1]	c51	N75-25503
Low power electromagnetic flowmeter providing accurate zero set			Shoulder harness and lap belt restraint system		
[NASA-CASE-ARC-10362-1]	c14	N73-32326	[NASA-CASE-ARC-10519-2]	c05	N75-25915
Protection of moisture sensitive optical components			Gas chromatograph injection system		
[NASA-CASE-ARC-10749-1]	c23	N73-32542	[NASA-CASE-ARC-10344-2]	c35	N75-26334
Hand-held photomicroscope			Reference apparatus for medical ultrasonic transducer		
[NASA-CASE-ARC-10468-1]	c14	N73-33361	[NASA-CASE-ARC-10753-1]	c54	N75-27760
Alignment apparatus using a laser having a gravitationally sensitive cavity reflector			Electric arc light source having undercut recessed anode		
[NASA-CASE-ARC-10444-1]	c16	N73-33397	[NASA-CASE-ARC-10266-1]	c33	N75-29318
Polyimide foam for the thermal insulation and fire protection			G-load measuring and indicator apparatus		
[NASA-CASE-ARC-10464-1]	c27	N74-12812	[NASA-CASE-ARC-10806-1]	c35	N75-29381
Flexible fire retardant polyisocyanate modified neoprene foam			NDIR gas analyzer based on absorption modulation ratios for known and unknown samples		
[NASA-CASE-ARC-10180-1]	c27	N74-12814	[NASA-CASE-ARC-10802-1]	c35	N75-30502
Diode-quad bridge circuit means			Diatomic infrared gasdynamic laser		
[NASA-CASE-ARC-10364-2(B)]	c33	N74-14941	[NASA-CASE-ARC-10370-1]	c36	N75-31426
Heater-mixer for stored fluids			Apparatus for measuring a sorbate dispersed in a fluid stream		
[NASA-CASE-ARC-10442-1]	c35	N74-15093	[NASA-CASE-ARC-10896-1]	c34	N75-32389
Bi-metallic fluid displacement apparatus			Pneumatic load compensating or controlling system		
[NASA-CASE-ARC-10441-1]	c35	N74-15126	[NASA-CASE-ARC-10907-1]	c37	N75-32465
Automatic real-time pair-feeding system for animals			Automatic fluid dispenser		
[NASA-CASE-ARC-10302-1]	c51	N74-15778	[NASA-CASE-ARC-10820-1]	c54	N75-32766
			Full color hybrid display for aircraft simulators		
			[NASA-CASE-ARC-10903-1]	c09	N76-10148
			Combined dual scatter, local oscillator laser Doppler velocimeter		
			[NASA-CASE-ARC-10642-1]	c36	N76-14447

Fiber modified polyurethane foam for ballistic protection			Electron microscope aperture system		
[NASA-CASE-ARC-10714-1]	c27	N76-15310	[NASA-CASE-ARC-10448-3]	c35	N77-14408
Transparent fire resistant polymeric structures			Liquid cooled brassiere and method of diagnosing malignant tumors therewith		
[NASA-CASE-ARC-10813-1]	c27	N76-16230	[NASA-CASE-ARC-11007-1]	c52	N77-14736
Noise suppressor for turbo fan jet engines			A walking boot assembly		
[NASA-CASE-ARC-10812-1]	c07	N76-18131	[NASA-CASE-ARC-11101-1]	c54	N77-14742
Modulated hydrogen ion flame detector			An improved cooling system for removing metabolic heat from an hermetically sealed spacesuit		
[NASA-CASE-ARC-10322-1]	c35	N76-18403	[NASA-CASE-ARC-11059-1]	c54	N77-14743
Electrical conductivity cell and method for fabricating the same			EKG and ultrasonoscope display		
[NASA-CASE-ARC-10810-1]	c33	N76-19339	[NASA-CASE-ARC-10994-2]	c52	N77-15619
Tread drum for animals			A miniature implantable ultrasonic echosonometer		
[NASA-CASE-ARC-10917-1]	c37	N76-20485	[NASA-CASE-ARC-11035-1]	c52	N77-15621
Method and apparatus for compensating reflection losses in a path length modulated absorption-absorption trace gas detector			Spacesuit mobility joints		
[NASA-CASE-ARC-10631-1]	c74	N76-20958	[NASA-CASE-ARC-11058-1]	c54	N77-15641
Trielectrode capacitive pressure transducer			Hingeless helicopter rotor with improved stability		
[NASA-CASE-ARC-10711-2]	c33	N76-21390	[NASA-CASE-ARC-10807-1]	c05	N77-17029
Nulling device for detection of trace gases by NDIR absorption			Process for preparing higher oxides of the alkali and alkaline earth metals		
[NASA-CASE-ARC-10760-1]	c25	N76-22323	[NASA-CASE-ARC-10992-1]	c25	N77-17178
Silica reusable surface insulation			Preparation of dielectric coatings of variable dielectric constant by plasma polymerization		
[NASA-CASE-ARC-10721-1]	c27	N76-22376	[NASA-CASE-ARC-10892-2]	c27	N77-17245
Optical alignment device			Contour detector and data acquisition system for the left ventricular outline		
[NASA-CASE-ARC-10932-1]	c74	N76-22993	[NASA-CASE-ARC-10985-1]	c52	N77-17701
Vehicle simulator binocular multiplanar visual display system			The engine air intake system		
[NASA-CASE-ARC-10808-1]	c09	N76-24280	[NASA-CASE-ARC-10761-1]	c07	N77-18154
Readout electrode assembly for measuring biological impedance			A reverse osmosis membrane of high urea rejection properties		
[NASA-CASE-ARC-10816-1]	c35	N76-24525	[NASA-CASE-ARC-10980-1]	c27	N77-18265
Schlieren system employing antiparallel reflector in the forward direction			Spring operated accelerator and constant force spring mechanism therefor		
[NASA-CASE-ARC-10971-1]	c09	N76-26224	[NASA-CASE-ARC-10898-1]	c35	N77-18417
Honeycomb-laminate composite structure			Rotating launch device for a remotely piloted aircraft		
[NASA-CASE-ARC-10912-1]	c24	N76-26286	[NASA-CASE-ARC-10979-1]	c09	N77-19076
An artificial leg employing a mechanical energy storage device for hip disarticulation			Low density bismaleimide-carbon microballoon composites		
[NASA-CASE-ARC-10916-1]	c54	N76-26871	[NASA-CASE-ARC-11040-1]	c24	N77-19173
System for measuring Reynolds in a turbulently flowing fluid			Tubular sublimatory evaporator heat sink		
[NASA-CASE-ARC-10755-2]	c34	N76-27517	[NASA-CASE-ARC-10912-1]	c34	N77-19353
Polymeric foams from cross-linkable poly-N-arylenebenzimidazoles			Optically selective, acoustically resonant gas detecting transducer		
[NASA-CASE-ARC-11008-1]	c27	N76-28421	[NASA-CASE-ARC-10639-1]	c35	N77-19388
Flow separation detector			Selective data segment monitoring system		
[NASA-CASE-ARC-11046-1]	c35	N76-28535	[NASA-CASE-ARC-10899-1]	c60	N77-19760
Oblique-wing supersonic aircraft			Oxygen post-treatment of plastic surfaces coated with plasma polymerized silicon-containing monomers		
[NASA-CASE-ARC-10470-3]	c05	N76-29217	[NASA-CASE-ARC-10915-2]	c27	N77-20256
Accelerometer telemetry system			All sky pointing attitude control system		
[NASA-CASE-ARC-10849-1]	c17	N76-29347	[NASA-CASE-ARC-10716-1]	c35	N77-20399
Miniature ingestible telemeter devices to measure deep-body temperature			Metallic hot wire anemometer		
[NASA-CASE-ARC-10583-1]	c52	N76-29894	[NASA-CASE-ARC-10911-1]	c35	N77-20400
Visual examination apparatus			Optical instrument employing reticle having preselected visual response pattern formed thereon		
[NASA-CASE-ARC-10329-2]	c52	N76-30793	[NASA-CASE-ARC-10976-1]	c74	N77-22950
Integrated structure vacuum tube			Induction powered biological radiosonde		
[NASA-CASE-ARC-10445-1]	c31	N76-31365	[NASA-CASE-ARC-11120-1]	c52	N77-23743
Ultraviolet and thermally stable polymer compositions			Abrasion resistant coatings for plastic surfaces		
[NASA-CASE-ARC-10592-2]	c27	N76-32315	[NASA-CASE-ARC-10915-3]	c24	N77-24200
Biomedical ultrasonoscope			Sampling video compression system		
[NASA-CASE-ARC-10994-1]	c52	N76-33835	[NASA-CASE-ARC-10984-1]	c32	N77-24328
Reaction cured glass and glass coatings			Method for making a hot wire anemometer and product thereof		
[NASA-CASE-ARC-11051-1]	c27	N77-10201	[NASA-CASE-ARC-10900-1]	c35	N77-24454
Rotary leveling base platform			Electric discharge for treatment of trace contaminants		
[NASA-CASE-ARC-10981-1]	c35	N77-10498	[NASA-CASE-ARC-10975-1]	c54	N77-24771
Thermistor holder for skin temperature measurements			Pseudo-backscatter laser Doppler velocimeter employing antiparallel-reflector in the forward direction		
[NASA-CASE-ARC-10855-1]	c52	N77-10780	[NASA-CASE-ARC-10970-1]	c36	N77-25501
Intumescent coating containing 4,4'-dinitrosulfanilide			Spacesuit torso closure		
[NASA-CASE-ARC-11042-1]	c24	N77-11119	[NASA-CASE-ARC-11100-1]	c54	N77-25784
Angle detector			Boron trifluoride coatings for thermoplastic materials		
[NASA-CASE-ARC-11036-1]	c35	N77-11364	[NASA-CASE-ARC-11057-1]	c27	N77-26308
Spectrally balanced chromatic landing approach lighting system			System for measuring three fluctuating velocity components in a turbulently flowing fluid		
[NASA-CASE-ARC-10990-1]	c04	N77-12031	[NASA-CASE-ARC-10974-1]	c34	N77-27345
Automatic multiple-sample applicator and electrophoresis apparatus			Constant lift rotor for a heavier than air craft		
[NASA-CASE-ARC-10991-1]	c25	N77-12157	[NASA-CASE-ARC-11045-1]	c05	N77-28111
Smoke generator			Process for the preparation of calcium superoxide		
[NASA-CASE-ARC-10905-1]	c37	N77-13418	[NASA-CASE-ARC-11053-1]	c25	N77-29254
Intumescent-ablator coatings using endothermic fillers					
[NASA-CASE-ARC-11043-1]	c34	N77-14372			

An improved controller arm for a remotely related slave arm
[NASA-CASE-ARC-11052-1] c54 N77-30751

Acoustically swept rotor
[NASA-CASE-ARC-11106-1] c05 N77-31130

Reduction of nitric oxide emissions from a combustor
[NASA-CASE-ARC-10814-2] c25 N77-31260

Twin-capacitive shaft angle encoder with analog output signal
[NASA-CASE-ARC-10897-1] c33 N77-31404

Anthropomorphic master/slave manipulator system
[NASA-CASE-ARC-10756-1] c54 N77-32721

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. HUGH L. DEYDEN FLIGHT RESEARCH CENTER, EDWARDS, CALIF.

Window comparator
[NASA-CASE-FRC-10090-1] c33 N77-11296

Fifth wheel
[NASA-CASE-FRC-10081-1] c37 N77-14477

An improved free wing for an aircraft
[NASA-CASE-FRC-10092-1] c05 N77-31135

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. ELECTRONICS RESEARCH CENTER, CAMBRIDGE, MASS.

Method and apparatus for wavelength tuning of liquid lasers
[NASA-CASE-ERC-10187] c16 N69-31343

A method for the deposition of beta-silicon carbide by isoelectronic
[NASA-CASE-ERC-10120] c26 N69-33482

Full flow with shut off and selective drainage control valve Patent application
[NASA-CASE-ERC-10208] c15 N70-10867

A method for selective gold diffusion of monolithic silicon devices and/or circuits Patent application
[NASA-CASE-ERC-10072] c09 N70-11148

Method and means for an improved electron beam scanning system Patent
[NASA-CASE-ERC-10552] c09 N71-12539

Apparatus and method for separating a semiconductor wafer Patent
[NASA-CASE-ERC-10138] c26 N71-14354

Focused image holography with extended sources Patent
[NASA-CASE-ERC-10019] c16 N71-15551

Recording and reconstructing focused image holograms Patent
[NASA-CASE-ERC-10017] c16 N71-15567

Sorption vacuum trap Patent
[NASA-CASE-XPR-09519] c14 N71-18483

Voltage tunable Gunn-type microwave generator Patent
[NASA-CASE-XPR-07894] c09 N71-18721

Array phasing device Patent
[NASA-CASE-ERC-10046] c10 N71-18722

Parametric microwave noise generator Patent
[NASA-CASE-XPR-10119] c09 N71-23598

Saturation current protection apparatus for saturable core transformers Patent
[NASA-CASE-ERC-10075] c09 N71-24800

Repetitively pulsed, wavelength selective laser Patent
[NASA-CASE-ERC-10178] c16 N71-24832

Optical mirror apparatus Patent
[NASA-CASE-ERC-10001] c23 N71-24868

Unsaturating saturable core transformer Patent
[NASA-CASE-ERC-10125] c09 N71-24893

Leak detector wherein a probe is monitored with ultraviolet radiation Patent
[NASA-CASE-ERC-10034] c15 N71-24896

Method for detecting leaks in hermetically sealed containers Patent
[NASA-CASE-ERC-10045] c15 N71-24910

Satellite aided vehicle avoidance system Patent
[NASA-CASE-ERC-10090] c21 N71-24948

Transverse piezoresistance and pinch effect electromechanical transducers Patent
[NASA-CASE-ERC-10088] c26 N71-25490

A solid state acoustic variable time delay line Patent
[NASA-CASE-ERC-10032] c10 N71-25900

Method and means for recording and reconstructing holograms without use of a reference beam Patent
[NASA-CASE-ERC-10020] c16 N71-26154

Electromechanical control actuator system Patent
[NASA-CASE-ERC-10022] c15 N71-26635

Method and apparatus for detecting gross leaks Patent
[NASA-CASE-ERC-10033] c14 N71-26672

Field ionization electrodes Patent
[NASA-CASE-ERC-10013] c09 N71-26678

Voltage regulator Patent
[NASA-CASE-ERC-10113] c09 N71-27053

A multichannel photoionization chamber for absorption analysis Patent
[NASA-CASE-ERC-10044-1] c14 N71-27090

Pressure sensitive transducers Patent
[NASA-CASE-ERC-10087] c14 N71-27334

Constant frequency output two stage induction machine systems Patent
[NASA-CASE-ERC-10065] c09 N71-27364

Fluid power transmitting gas bearing Patent
[NASA-CASE-ERC-10097] c15 N71-28465

Color television systems using a single gun color cathode ray tube Patent
[NASA-CASE-ERC-10098] c09 N71-28618

Ion microprobe mass spectrometer for analyzing fluid materials Patent
[NASA-CASE-ERC-10014] c14 N71-28863

Orifice gross leak tester Patent
[NASA-CASE-ERC-10150] c14 N71-28992

Device for measuring light scattering wherein the measuring beam is successively reflected between a pair of parallel reflectors Patent
[NASA-CASE-ERC-11203] c14 N71-28994

Quasi-optical microwave component Patent
[NASA-CASE-ERC-10011] c07 N71-29065

Multiple hologram recording and readout system Patent
[NASA-CASE-ERC-10151] c16 N71-29131

Plasma fluidic hybrid display Patent
[NASA-CASE-ERC-10100] c09 N71-33519

Optical systems having spatially invariant outputs
[NASA-CASE-ERC-10248] c14 N72-17323

Method of detecting impending saturation of magnetic cores
[NASA-CASE-ERC-10089] c23 N72-17747

Improved satellite aided vehicle avoidance system
[NASA-CASE-ERC-10419] c21 N72-21631

Logarithmic function generator utilizing an exponentially varying signal in an inverse manner
[NASA-CASE-ERC-10267] c09 N72-23173

Method and apparatus for limiting field emission current
[NASA-CASE-ERC-10015-2] c10 N72-27246

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. FLIGHT RESEARCH CENTER, EDWARDS, CALIF.

Rocket chamber leak test fixture
[NASA-CASE-XPR-09479] c14 N69-27503

Three axis controller Patent
[NASA-CASE-XPR-00181] c21 N70-33279

Catalyst bed removing tool Patent
[NASA-CASE-XPR-00811] c15 N70-36901

Two-axis controller Patent
[NASA-CASE-XPR-04104] c03 N70-42073

Controlled visibility device for an aircraft Patent
[NASA-CASE-XPR-04147] c11 N71-10748

Biomedical electrode arrangement Patent
[NASA-CASE-XPR-10856] c05 N71-11189

Lifting body Patent Application
[NASA-CASE-FRC-10063] c01 N71-12217

Energy management system for glider type vehicle Patent
[NASA-CASE-XPR-00756] c02 N71-13421

Quick attach mechanism Patent
[NASA-CASE-XPR-05421] c15 N71-22994

Heat flux measuring system Patent
[NASA-CASE-XPR-03802] c33 N71-23085

Threadless fastener apparatus Patent
[NASA-CASE-XPR-05302] c15 N71-23254

Traversing probe Patent
[NASA-CASE-XPR-02007] c12 N71-24692

Layout tool Patent
[NASA-CASE-FRC-10005] c15 N71-26145

Pulsed excitation voltage circuit for transducers
[NASA-CASE-FRC-10036] c09 N72-22200

Acoustical transducer calibrating system and apparatus
[NASA-CASE-FRC-10060-1] c14 N73-27379

Three-axis adjustable loading structure
[NASA-CASE-FRC-10051-1] c35 N74-13129

Terminal guidance system
[NASA-CASE-FRC-10049-1] c04 N74-13420

Full wave modulator-demodulator amplifier apparatus

[NASA-CASE-FRC-10072-1] c33 N74-14939
 Rotating raster generator
 [NASA-CASE-FRC-10071-1] c32 N74-20813
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
GODDARD INST. FOR SPACE STUDIES, NEW YORK.
 Very narrow band width receiver
 [NASA-CASE-GSC-12142-1] c32 N77-20299
 A rotary electric device
 [NASA-CASE-GSC-12138-1] c33 N77-20344
 Apparatus and method for determining the position of a radiant energy source
 [NASA-CASE-GSC-12147-1] c35 N77-20410
 Wide power range microwave feedback controller
 [NASA-CASE-GSC-12146-1] c33 N77-21322
 A system for synchronizing synthesizers of communication systems
 [NASA-CASE-GSC-12148-1] c32 N77-22314
 Application of luciferase assay for ATP to antimicrobial drug susceptibility
 [NASA-CASE-GSC-12039-1] c51 N77-22794
 Method for fabricating a mass spectrometer inlet leak
 [NASA-CASE-GSC-12077-1] c35 N77-24455
 Length controlled stabilized mode-lock Nd:YAG laser
 [NASA-CASE-GSC-11571-1] c36 N77-25499
 Three phase full wave dc motor decoder
 [NASA-CASE-GSC-11824-1] c33 N77-26386
 A cervix-to-rectum measuring device in a radiation applicator for use in the treatment of cervical cancer
 [NASA-CASE-GSC-12081-2] c52 N77-26796
 Determination of antimicrobial susceptibilities of infected urines without isolation
 [NASA-CASE-GSC-12046-1] c52 N77-26797
 Gregorian all-reflective optical system
 [NASA-CASE-GSC-12058-1] c74 N77-26942
 Quadrature demodulation
 [NASA-CASE-GSC-12137-1] c32 N77-27272
 Opto-mechanical subsystem with temperature compensation through isothermal design
 [NASA-CASE-GSC-12059-1] c35 N77-27366
 Controlled caging and uncaging mechanism
 [NASA-CASE-GSC-11063-1] c37 N77-27400
 System for and method of freezing biological tissue
 [NASA-CASE-GSC-12173-1] c52 N77-27693
 Locking mechanism for orthopedic braces
 [NASA-CASE-GSC-12082-2] c52 N77-27694
 Low thrust monopropellant engine
 [NASA-CASE-GSC-12194-1] c20 N77-28219
 Wideband heterodyne receiver for laser communication system
 [NASA-CASE-GSC-12053-1] c32 N77-28346
 Method and apparatus for producing an image from a transparent object
 [NASA-CASE-GSC-11989-1] c74 N77-28932
 A complementary DMOS-VMOS integrated circuit structure
 [NASA-CASE-GSC-12190-1] c33 N77-29403
 Low intensity X-ray and gamma-ray imaging device
 [NASA-CASE-GSC-12263-1] c35 N77-29471
 Pseudo noise code and data transmission method and apparatus
 [NASA-CASE-GSC-12017-1] c32 N77-30308
 Speech analyzer
 [NASA-CASE-GSC-11898-1] c32 N77-30309
 Partial polarizer filter
 [NASA-CASE-GSC-12225-1] c74 N77-30935
 Automatic transponder
 [NASA-CASE-GSC-12075-1] c32 N77-31350
 An interleaving device
 [NASA-CASE-GSC-12111-2] c60 N77-31800
 Method of treating the surface of a glass member
 [NASA-CASE-GSC-12110-1] c27 N77-32308
 Flat-plate heat pipe
 [NASA-CASE-GSC-11998-1] c34 N77-32413
 Fluid sampling device
 [NASA-CASE-GSC-12143-1] c35 N77-32456
 Analog to digital converter for two-dimensional radiant energy array computers
 [NASA-CASE-GSC-11839-3] c60 N77-32731
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
GODDARD SPACE FLIGHT CENTER, GREENBELT, MD.
 Regulated dc to dc converter
 [NASA-CASE-XGS-03429] c03 N69-21330
 Apparatus for measuring swelling characteristics of membranes
 [NASA-CASE-XGS-03465] c14 N69-21363
 Tumbler system to provide random motion
 [NASA-CASE-XGS-02437] c15 N69-21472
 Automatic acquisition system for phase-lock loop
 [NASA-CASE-XGS-04994] c09 N69-21543
 Low power drain semi-conductor circuit
 [NASA-CASE-XGS-04999] c09 N69-24317
 Spacecraft battery seals
 [NASA-CASE-XGS-03864] c15 N69-24320
 Scanning aspect sensor employing an apertured disc and a commutator
 [NASA-CASE-XGS-08266] c14 N69-21432
 Monopulse system with an electronic scanner
 [NASA-CASE-XGS-05582] c07 N69-27460
 Ring counter
 [NASA-CASE-XGS-03095] c09 N69-27463
 Retrodirective optical system
 [NASA-CASE-XGS-04480] c16 N69-27491
 Time division multiplex system
 [NASA-CASE-XGS-05918] c07 N69-39974
 Doppler frequency spread correction device for multiplex transmissions
 [NASA-CASE-XGS-02749] c07 N69-39978
 Alkali-metal silicate protective coating
 [NASA-CASE-XGS-04119] c18 N69-39979
 Device for measuring electron-beam intensities and for subjecting materials to electron irradiation in an electron microscope
 [NASA-CASE-XGS-01725] c14 N69-39982
 Light sensitive digital aspect sensor Patent
 [NASA-CASE-XGS-00359] c14 N70-34158
 Method and apparatus for determining satellite orientation utilizing spatial energy sources Patent
 [NASA-CASE-XGS-00466] c21 N70-34297
 Binary magnetic memory device Patent
 [NASA-CASE-XGS-00174] c08 N70-34743
 Full binary adder Patent
 [NASA-CASE-XGS-00689] c08 N70-34787
 Ultra-long monostable multivibrator employing bistable semiconductor switch to allow charging of timing circuit Patent
 [NASA-CASE-XGS-00381] c09 N70-34819
 Space and atmospheric reentry vehicle Patent
 [NASA-CASE-XGS-00260] c31 N70-37924
 Variable frequency magnetic multivibrator Patent
 [NASA-CASE-XGS-00458] c09 N70-38604
 Switching mechanism with energy storage means Patent
 [NASA-CASE-XGS-00473] c03 N70-38713
 Variable frequency magnetic multivibrator Patent
 [NASA-CASE-XGS-00131] c09 N70-38995
 Stretch de-spin mechanism Patent
 [NASA-CASE-XGS-00619] c30 N70-40016
 Folding boom assembly Patent
 [NASA-CASE-XGS-00938] c32 N70-41367
 Cryogenic connector for vacuum use Patent
 [NASA-CASE-XGS-02441] c15 N70-41629
 Endless tape cartridge Patent
 [NASA-CASE-XGS-00769] c14 N70-41647
 Apparatus for producing three-dimensional recordings of fluorescence spectra Patent
 [NASA-CASE-XGS-01231] c14 N70-41676
 Method and apparatus for determining electromagnetic characteristics of large surface area passive reflectors Patent
 [NASA-CASE-XGS-02608] c07 N70-41678
 Prevention of pressure build-up in electrochemical cells Patent
 [NASA-CASE-XGS-01419] c03 N70-41864
 Variable time constant smoothing circuit Patent
 [NASA-CASE-XGS-01983] c10 N70-41964
 Endless tape transport mechanism Patent
 [NASA-CASE-XGS-01223] c07 N71-10609
 Reversible ring counter employing cascaded single SCR stages Patent
 [NASA-CASE-XGS-01473] c09 N71-10673
 Electronic beam switching commutator Patent
 [NASA-CASE-XGS-01451] c09 N71-10677
 Sun tracker with rotatable plane-parallel plate and two photocells Patent
 [NASA-CASE-XGS-01159] c21 N71-10678
 Non-magnetic battery case Patent
 [NASA-CASE-XGS-00886] c03 N71-11053
 Interconnection of solar cells Patent
 [NASA-CASE-XGS-01475] c03 N71-11058
 Frequency shift keyed demodulator Patent
 [NASA-CASE-XGS-02889] c07 N71-11282
 Bi-polar phase detector and corrector for split phase PCM data signals Patent

[NASA-CASE-XGS-01590] c07 N71-12392
Data processor having multiple sections
activated at different times by selective
power coupling to the sections Patent
[NASA-CASE-XGS-04767] c08 N71-12494
Position location system and method Patent
[NASA-CASE-GSC-10087-2] c21 N71-13958
Fire resistant coating composition Patent
[NASA-CASE-GSC-10072] c18 N71-14014
Passively regulated water electrolysis rocket
engine Patent
[NASA-CASE-XGS-08729] c28 N71-14044
Attitude control system Patent
[NASA-CASE-XGS-04393] c21 N71-14159
Retrodirective modulator Patent
[NASA-CASE-GSC-10062] c14 N71-15605
Spacecraft attitude detection system by stellar
reference Patent
[NASA-CASE-XGS-03431] c21 N71-15642
Cartwheel satellite synchronization system Patent
[NASA-CASE-XGS-05579] c31 N71-15676
Wide range linear fluxgate magnetometer Patent
[NASA-CASE-XGS-01587] c14 N71-15962
Low friction magnetic recording tape Patent
[NASA-CASE-XGS-00373] c23 N71-15978
Method for etching copper Patent
[NASA-CASE-XGS-06306] c17 N71-16044
Bacteriostatic conformal coating and methods of
application Patent
[NASA-CASE-GSC-10007] c18 N71-16046
Serrdyne frequency converter re-entrant
amplifier system Patent
[NASA-CASE-XGS-01022] c07 N71-16088
Position location and data collection system and
method Patent
[NASA-CASE-GSC-10083-1] c30 N71-16090
Position sensing device employing misaligned
magnetic field generating and detecting
apparatus Patent
[NASA-CASE-XGS-07514] c23 N71-16099
Optical tracker having overlapping reticles on
parallel axes Patent
[NASA-CASE-XGS-05715] c23 N71-16100
Self-erecting reflector Patent
[NASA-CASE-XGS-09190] c31 N71-16102
Dust particle injector for hypervelocity
accelerators Patent
[NASA-CASE-XGS-06628] c24 N71-16213
Ellipsoidal mirror reflectometer including means
for averaging the radiation reflected from the
sample Patent
[NASA-CASE-XGS-05291] c23 N71-16341
Angular position and velocity sensing apparatus
Patent
[NASA-CASE-XGS-05680] c14 N71-17585
Apparatus for controlling the velocity of an
electromechanical drive for interferometers
and the like Patent
[NASA-CASE-XGS-03532] c14 N71-17627
Omni-directional anisotropic molecular trap Patent
[NASA-CASE-XGS-00783] c30 N71-17788
Method of making tubes Patent
[NASA-CASE-XGS-04175] c15 N71-18579
Pulse-type magnetic core memory element circuit
with blocking oscillator feedback Patent
[NASA-CASE-XGS-03303] c08 N71-18595
Ripple add and ripple subtract binary counters
Patent
[NASA-CASE-XGS-04766] c08 N71-18602
Computing apparatus Patent
[NASA-CASE-XGS-04765] c08 N71-18693
Stepping motor control circuit Patent
[NASA-CASE-GSC-10366-1] c10 N71-18772
Traffic control system and method Patent
[NASA-CASE-GSC-10087-1] c02 N71-19287
Apparatus for measuring current flow Patent
[NASA-CASE-XGS-02439] c14 N71-19431
Synchronous counter Patent
[NASA-CASE-XGS-02440] c08 N71-19432
Wide range data compression system Patent
[NASA-CASE-XGS-02612] c08 N71-19435
Apparatus for computing square roots Patent
[NASA-CASE-XGS-04768] c08 N71-19437
Method and apparatus for battery charge control
Patent
[NASA-CASE-XGS-05432] c03 N71-19438
Stable amplifier having a stable quiescent point
Patent
[NASA-CASE-XGS-02812] c09 N71-19466

Tracking antenna system Patent
[NASA-CASE-GSC-10553-1] c07 N71-19854
Electrochemical coulometer and method of forming
same Patent
[NASA-CASE-XGS-05434] c03 N71-20491
Display for binary characters Patent
[NASA-CASE-XGS-04987] c08 N71-20571
Amplifier clamping circuit for horizon scanner
Patent
[NASA-CASE-XGS-01784] c10 N71-20782
Diversity receiving system with diversity phase
lock Patent
[NASA-CASE-XGS-01222] c10 N71-20841
Signal detection and tracking apparatus Patent
[NASA-CASE-XGS-03502] c10 N71-20852
Polarization diversity monopulse tracking
receiver Patent
[NASA-CASE-XGS-03501] c09 N71-20864
System for recording and reproducing pulse code
modulated data Patent
[NASA-CASE-XGS-01021] c08 N71-21042
Satellite appendage tie down cord Patent
[NASA-CASE-XGS-02554] c31 N71-21064
Reaction wheel scanner Patent
[NASA-CASE-XGS-02629] c14 N71-21082
Nonmagnetic, explosive actuated indexing device
Patent
[NASA-CASE-XGS-02422] c15 N71-21529
Bidirectional step torque filter with zero
backlash characteristic Patent
[NASA-CASE-XGS-04227] c15 N71-21744
Conforming polisher for aspheric surface of
revolution Patent
[NASA-CASE-XGS-02884] c15 N71-22705
Precision thrust gage Patent
[NASA-CASE-XGS-02319] c14 N71-22965
Sealing device for an electrochemical cell Patent
[NASA-CASE-XGS-02630] c03 N71-22974
Rotary bead dropper and selector for testing
micrometeorite detectors Patent
[NASA-CASE-XGS-03304] c09 N71-22988
Moment of inertia test fixture Patent
[NASA-CASE-XGS-01023] c14 N71-22992
Fluid flow meter with comparator reference means
Patent
[NASA-CASE-XGS-01331] c14 N71-22996
Foamed in place ceramic refractory insulating
material Patent
[NASA-CASE-XGS-02435] c18 N71-22998
Digital telemetry system Patent
[NASA-CASE-XGS-01812] c07 N71-23001
Bonded elastomeric seal for electrochemical
cells Patent
[NASA-CASE-XGS-02631] c03 N71-23006
Apparatus providing a directive field pattern
and attitude sensing of a spin stabilized
satellite Patent
[NASA-CASE-XGS-02607] c31 N71-23009
Complementary regenerative switch Patent
[NASA-CASE-XGS-02751] c09 N71-23015
Solid state pulse generator with constant output
width, for variable input width, in nanosecond
range Patent
[NASA-CASE-XGS-03427] c10 N71-23029
Sidereal frequency generator Patent
[NASA-CASE-XGS-02610] c14 N71-23174
Solar cell and circuit array and process for
nullifying magnetic fields Patent
[NASA-CASE-XGS-03390] c03 N71-23187
Passive synchronized spike generator with high
input impedance and low output impedance and
capacitor power supply Patent
[NASA-CASE-XGS-03632] c09 N71-23311
Sealed electrochemical cell provided with a
flexible casing Patent
[NASA-CASE-XGS-01513] c03 N71-23336
Digitally controlled frequency synthesizer Patent
[NASA-CASE-XGS-02317] c09 N71-23525
Radio frequency coaxial high pass filter Patent
[NASA-CASE-XGS-01418] c09 N71-23573
Apparatus for phase stability determination Patent
[NASA-CASE-XGS-01118] c10 N71-23662
Tape recorder Patent
[NASA-CASE-XGS-08259] c14 N71-23698
Balance torque meter Patent
[NASA-CASE-XGS-01013] c14 N71-23725
Mechanical actuator Patent
[NASA-CASE-XGS-04548] c15 N71-24045

Selective plating of etched circuits without removing previous plating Patent		
[NASA-CASE-XGS-03120]	c15	N71-24047
Alkali metal silicate protective coating Patent		
[NASA-CASE-XGS-04799]	c18	N71-24183
Strain gauge measuring techniques Patent		
[NASA-CASE-XGS-04478]	c14	N71-24233
Electromagnetic polarization systems and methods Patent		
[NASA-CASE-GSC-10021-1]	c09	N71-24595
Redundant actuating mechanism Patent		
[NASA-CASE-XGS-08716]	c15	N71-24600
Satellite communication system and method Patent		
[NASA-CASE-GSC-10118-1]	c07	N71-24621
Programmable telemetry system Patent		
[NASA-CASE-GSC-10131-1]	c07	N71-24624
Coulometer and third electrode battery charging circuit Patent		
[NASA-CASE-GSC-10487-1]	c03	N71-24719
Electronic scanning of 2-channel monopulse patterns Patent		
[NASA-CASE-GSC-10299-1]	c09	N71-24804
Annular slit colloid thruster Patent		
[NASA-CASE-GSC-10709-1]	c28	N71-25213
Voltage to frequency converter Patent		
[NASA-CASE-GSC-10022-1]	c10	N71-25882
Direct current motor with stationary armature and field Patent		
[NASA-CASE-XGS-05290]	c09	N71-25999
Buck boost voltage regulation circuit Patent		
[NASA-CASE-GSC-10735-1]	c10	N71-26085
Adaptive system and method for signal generation Patent		
[NASA-CASE-GSC-11367]	c10	N71-26374
Control apparatus for applying pulses of selectively predetermined duration to a sequence of loads Patent		
[NASA-CASE-XGS-04224]	c10	N71-26418
Turn on transient limiter Patent		
[NASA-CASE-GSC-10413]	c10	N71-26531
Voltage regulator with plural parallel power source sections Patent		
[NASA-CASE-GSC-10891-1]	c10	N71-26626
Method for generating ultra-precise angles Patent		
[NASA-CASE-XGS-04173]	c19	N71-26674
Resettable monostable pulse generator Patent		
[NASA-CASE-GSC-11139]	c09	N71-27016
Micro-pound extended range thrust stand Patent		
[NASA-CASE-GSC-10710-1]	c28	N71-27094
Synchronous dc direct drive system Patent		
[NASA-CASE-GSC-10065-1]	c10	N71-27136
Antenna array at focal plane of reflector with coupling network for beam switching Patent		
[NASA-CASE-GSC-10220-1]	c07	N71-27233
Gravity gradient attitude control system Patent		
[NASA-CASE-GSC-10555-1]	c21	N71-27324
Segmented superconducting magnet for a broad band traveling wave maser Patent		
[NASA-CASE-XGS-10518]	c16	N71-28554
Millimeter wave antenna system Patent Application		
[NASA-CASE-GSC-10949-1]	c07	N71-28965
Sampled data controller Patent		
[NASA-CASE-GSC-10554-1]	c08	N71-29033
Variable digital processor including a register for shifting and rotating bits in either direction Patent		
[NASA-CASE-GSC-10186]	c08	N71-33110
Combustion products generating and metering device [NASA-CASE-GSC-11095-1]	c14	N72-10375
Analog spatial maneuver computer [NASA-CASE-GSC-10880-1]	c08	N72-11172
Helical recorder arrangement for multiple channel recording on both sides of the tape [NASA-CASE-GSC-10614-1]	c09	N72-11224
Method and apparatus for eliminating coherent noise in a coherent energy imaging system without destroying spatial coherence [NASA-CASE-GSC-11133-1]	c23	N72-11568
Position location system and method [NASA-CASE-GSC-10087-3]	c07	N72-12080
Facsimile video remodulation network [NASA-CASE-GSC-10185-1]	c07	N72-12081
Frangible electrochemical cell [NASA-CASE-XGS-10010]	c03	N72-15986
Caterpillar micro positioner [NASA-CASE-GSC-10780-1]	c14	N72-16283
Minimech self-deploying beam mechanism [NASA-CASE-GSC-10566-1]	c15	N72-18477
Heated porous plug microthruster [NASA-CASE-GSC-10640-1]	c28	N72-18766
Optimum performance spacecraft solar cell system [NASA-CASE-GSC-10669-1]	c03	N72-20031
Monostable multivibrator [NASA-CASE-GSC-10082-1]	c10	N72-20221
Roll alignment detector [NASA-CASE-GSC-10514-1]	c14	N72-20379
Cosmic dust sensor [NASA-CASE-GSC-10503-1]	c14	N72-20381
Solenoid valve including guide for armature and valve member [NASA-CASE-GSC-10607-1]	c15	N72-20942
Fast response low power drain logic circuits [NASA-CASE-GSC-10878-1]	c10	N72-22236
Trap for preventing diffusion pump backstreaming [NASA-CASE-GSC-10518-1]	c15	N72-22489
Resistance soldering apparatus [NASA-CASE-GSC-10913]	c15	N72-22491
Optical system support apparatus [NASA-CASE-XER-07896-2]	c23	N72-22673
SCR lamp driver [NASA-CASE-GSC-10221-1]	c09	N72-23171
Potassium silicate zinc coatings [NASA-CASE-GSC-10361-1]	c18	N72-23581
Synchronous orbit battery cycler [NASA-CASE-GSC-11211-1]	c03	N72-25020
Flavin coenzyme assay [NASA-CASE-GSC-10565-1]	c06	N72-25149
Location identification system [NASA-CASE-ERC-10324]	c07	N72-25173
A dc to ac to dc converter having transistor synchronous rectifiers [NASA-CASE-GSC-11126-1]	c09	N72-25253
Tungsten contacts on silicon substrates [NASA-CASE-GSC-10695-1]	c09	N72-25259
Bacterial contamination monitor [NASA-CASE-GSC-10879-1]	c14	N72-25413
Honeycomb panels formed of minimal surface periodic tubule layers [NASA-CASE-ERC-10364]	c18	N72-25540
Honeycomb core structures of minimal surface tubule sections [NASA-CASE-ERC-10363]	c18	N72-25541
Gunn-type solid state devices [NASA-CASE-XER-07895]	c26	N72-25679
Use of unilluminated solar cells as shunt diodes for a solar array [NASA-CASE-GSC-10344-1]	c03	N72-27053
Active tuned circuit [NASA-CASE-GSC-11340-1]	c10	N72-33230
Electric motive machine including magnetic bearing [NASA-CASE-XGS-07805]	c15	N72-33476
Cosmic dust or other similar outer space particles impact location detector [NASA-CASE-GSC-11291-1]	c25	N72-33696
Method and apparatus for determining the contents of contained gas samples [NASA-CASE-GSC-10903-1]	c14	N73-12444
System for stabilizing torque between a balloon and gondola [NASA-CASE-GSC-11077-1]	c02	N73-13008
Diffuse reflective coating [NASA-CASE-GSC-11214-1]	c06	N73-13128
Data processor with conditionally supplied clock signals [NASA-CASE-GSC-10975-1]	c08	N73-13187
Apparatus for vibrational testing of articles [NASA-CASE-GSC-11302-1]	c14	N73-13416
Method and system for ejecting fairing sections from a rocket vehicle [NASA-CASE-GSC-10590-1]	c31	N73-14853
Plural beam antenna [NASA-CASE-GSC-11013-1]	c09	N73-19234
Star tracking reticles and process for the production thereof [NASA-CASE-GSC-11188-2]	c21	N73-19630
Delayed simultaneous release mechanism [NASA-CASE-GSC-10814-1]	c03	N73-20039
Doppler compensation by shifting transmitted object frequency within limits [NASA-CASE-GSC-10087-4]	c07	N73-20174
Telemetry processor [NASA-CASE-GSC-11388-1]	c07	N73-24187
Signal-to-noise ratio determination circuit [NASA-CASE-GSC-11239-1]	c10	N73-25241
Nutation damper [NASA-CASE-GSC-11205-1]	c15	N73-25513

Low outgassing polydimethylsiloxane material and preparation thereof
[NASA-CASE-GSC-11358-1] c06 N73-26100

Method of detecting and counting bacteria in body fluids
[NASA-CASE-GSC-11092-2] c04 N73-27052

Protein sterilization method of firefly luciferase using reduced pressure and molecular sieves
[NASA-CASE-GSC-10225-1] c06 N73-27086

Process for making RF shielded cable connector assemblies and the products formed thereby
[NASA-CASE-GSC-11215-1] c09 N73-28083

Device for determining relative angular position between a spacecraft and a radiation emitting celestial body
[NASA-CASE-GSC-11444-1] c14 N73-28490

Microscope multi-angle, reflection, viewing adaptor and photographic recording system
[NASA-CASE-GSC-11690-1] c14 N73-28499

Fastener stretcher
[NASA-CASE-GSC-11149-1] c15 N73-30457

Spacecraft attitude sensor
[NASA-CASE-GSC-10890-1] c21 N73-30640

Automatic instrument for chemical processing to detect microorganism in biological samples by measuring light reactions
[NASA-CASE-GSC-11169-2] c05 N73-32011

Star tracking reticles
[NASA-CASE-GSC-11188-1] c14 N73-32320

Peen plating
[NASA-CASE-GSC-11163-1] c15 N73-32360

Recorder/processor apparatus
[NASA-CASE-GSC-11553-1] c35 N74-15831

Method of making porous conductive supports for electrodes
[NASA-CASE-GSC-11367-1] c44 N74-19692

Formation of star tracking reticles
[NASA-CASE-GSC-11188-2] c74 N74-20008

Radiation hardening of MOS devices by boron
[NASA-CASE-GSC-11425-1] c76 N74-20329

Amplitude steered array
[NASA-CASE-GSC-11446-1] c33 N74-20860

Rotary solenoid shutter drive assembly and rotary inertia damper and stop plate assembly
[NASA-CASE-GSC-11560-1] c33 N74-20861

Ultra-stable oscillator with complementary transistors
[NASA-CASE-GSC-11513-1] c33 N74-20862

High efficiency multifrequency feed
[NASA-CASE-GSC-11909] c32 N74-20863

Turnstile slot antenna
[NASA-CASE-GSC-11428-1] c32 N74-20864

Method and apparatus for checking fire detectors
[NASA-CASE-GSC-11600-1] c35 N74-21019

Long range laser traversing system
[NASA-CASE-GSC-11262-1] c36 N74-21091

Method and apparatus for optically monitoring the angular position of a rotating mirror
[NASA-CASE-GSC-11353-1] c74 N74-21304

Image tube
[NASA-CASE-GSC-11602-1] c33 N74-21850

Apparatus for controlling the temperature of balloon-borne equipment
[NASA-CASE-GSC-11620-1] c34 N74-23039

Coaxial anode wire for gas radiation counters
[NASA-CASE-GSC-11492-1] c35 N74-26949

Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] c52 N74-27566

Heat flow calorimeter
[NASA-CASE-GSC-11434-1] c34 N74-27859

Air conditioning system and component therefore distributing air flow from opposite directions
[NASA-CASE-GSC-11445-1] c31 N74-27902

Passive dual spin misalignment compensators
[NASA-CASE-GSC-11479-1] c35 N74-28097

Star scanner
[NASA-CASE-GSC-11569-1] c89 N74-30886

Millimeter wave pumped parametric amplifier
[NASA-CASE-GSC-11617-1] c33 N74-32660

Structural heat pipe
[NASA-CASE-GSC-11619-1] c34 N75-12222

Remote platform power conserving system
[NASA-CASE-GSC-11182-1] c15 N75-13007

Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-1] c37 N75-15992

Magnetic bearing
[NASA-CASE-GSC-11079-1] c37 N75-18574

Dish antenna having switchable beamwidth
[NASA-CASE-GSC-11760-1] c33 N75-19516

X-Y alphanumeric character generator for oscilloscopes
[NASA-CASE-GSC-11582-1] c33 N75-19517

Controllable high voltage source having fast settling time
[NASA-CASE-GSC-11844-1] c33 N75-19522

Dually mode locked Nd:YAG laser
[NASA-CASE-GSC-11746-1] c36 N75-19654

Self-regulating proportionally controlled heating apparatus and technique
[NASA-CASE-GSC-11752-1] c77 N75-20140

Low speed phaselock speed control system
[NASA-CASE-GSC-11127-1] c09 N75-24758

Modulator for tone and binary signals
[NASA-CASE-GSC-11743-1] c32 N75-24981

Digital phase-locked loop
[NASA-CASE-GSC-11623-1] c33 N75-25040

Magnetic tape head function switching system
[NASA-CASE-GSC-11956-1] c35 N75-25134

Radiation hardening of MOS devices by boron
[NASA-CASE-GSC-11425-2] c76 N75-25730

Correlation type phase detector
[NASA-CASE-GSC-11744-1] c33 N75-26243

Process for making sheets with parallel pores of uniform size
[NASA-CASE-GSC-10984-1] c37 N75-26371

Impact position detector for outer space particles
[NASA-CASE-GSC-11829-1] c35 N75-27331

Binary to binary coded decimal converter
[NASA-CASE-GSC-12044-1] c60 N76-13781

Single frequency, two feed dish antenna having switchable beamwidth
[NASA-CASE-GSC-11968-1] c32 N76-15329

Micrometeoroid velocity and trajectory analyzer
[NASA-CASE-GSC-11892-1] c35 N76-15433

Atomic standard with variable storage volume
[NASA-CASE-GSC-11895-1] c35 N76-15436

Method and apparatus for splitting a beam of energy
[NASA-CASE-GSC-12083-1] c36 N76-15451

High voltage distributor
[NASA-CASE-GSC-11849-1] c33 N76-16332

Moving particle composition analyzer
[NASA-CASE-GSC-11889-1] c35 N76-16393

A 2 degree/90 degree laboratory scattering photometer
[NASA-CASE-GSC-12088-1] c35 N76-17369

Variable beamwidth antenna
[NASA-CASE-GSC-11862-1] c32 N76-18295

Automatic character skew and spacing checking network
[NASA-CASE-GSC-11925-1] c33 N76-18353

Axially and radially controllable magnetic bearing
[NASA-CASE-GSC-11551-1] c37 N76-18459

Two-dimensional radiant energy array computers and computing devices
[NASA-CASE-GSC-11839-2] c60 N76-18803

Apparatus for simulating optical transmission links
[NASA-CASE-GSC-11877-1] c74 N76-18913

Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-3] c24 N76-19234

Camera arrangement
[NASA-CASE-GSC-12032-2] c35 N76-19408

Telemetry synchronizer
[NASA-CASE-GSC-11868-1] c17 N76-22245

Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-1] c54 N76-22914

Magnifying image intensifier
[NASA-CASE-GSC-12010-1] c33 N76-23482

Remote sensing of vegetation and soil using microwave ellipsometry
[NASA-CASE-GSC-11976-1] c43 N76-23671

Ultraviolet light reflective coating
[NASA-CASE-GSC-11786-1] c24 N76-24363

Improved low cost substrates for polycrystalline solar cells
[NASA-CASE-GSC-12022-2] c44 N76-26695

Switchable beamwidth monopulse method and system
[NASA-CASE-GSC-11924-1] c33 N76-27472

Fabrication of polycrystalline solar cells on low-cost substrates
[NASA-CASE-GSC-12022-1] c44 N76-28635

Method of detecting and counting bacteria
[NASA-CASE-GSC-11917-2] c51 N76-29891

Polarization compensator for optical communications					Cryogenic storage system Patent				
[NASA-CASE-GSC-11782-1]	c74	N76-30053			[NASA-CASE-XMS-04390]	c31	N7C-41871		
Mechanical capacitor					Mass measuring system Patent				
[NASA-CASE-GSC-12030-1]	c44	N76-30652			[NASA-CASE-XMS-03371]	c05	N70-42000		
Static coefficient test method and apparatus					Line cutter Patent				
[NASA-CASE-GSC-11893-1]	c35	N76-31489			[NASA-CASE-XMS-04072]	c15	N70-42017		
Digital plus analog output encoder					Transpirationally cooled heat ablation system Patent				
[NASA-CASE-GSC-12115-1]	c62	N76-31946			[NASA-CASE-XMS-02677]	c31	N70-42075		
Method and apparatus for neutralizing potentials induced on spacecraft surfaces					Voltage-current characteristic simulator Patent				
[NASA-CASE-GSC-11963-1]	c33	N77-10429			[NASA-CASE-XMS-01554]	c10	N71-10578		
Systems and methods for determining radio frequency interference					Training vehicle for controlling attitude Patent				
[NASA-CASE-GSC-12150-1]	c32	N77-12247			[NASA-CASE-XMS-02977]	c11	N71-10746		
Inrush current limiter					Gravity stabilized flying vehicle Patent				
[NASA-CASE-GSC-11789-1]	c33	N77-14333			[NASA-CASE-XMS-12111-1]	c02	N71-11039		
Linear phase demodulator including a phase locked loop with auxiliary feedback loop					Helmet assembly and latch means therefor Patent				
[NASA-CASE-GSC-12018-1]	c33	N77-14334			[NASA-CASE-XMS-04935]	c05	N71-11190		
Reel safety brake					Pressure suit tie-down mechanism Patent				
[NASA-CASE-GSC-11960-1]	c37	N77-14479			[NASA-CASE-XMS-00784]	c05	N71-12335		
Two-dimensional radiant energy array computers and computing devices					Hand-held self-maneuvering unit Patent				
[NASA-CASE-GSC-11839-1]	c60	N77-14751			[NASA-CASE-XMS-05304]	c05	N71-12336		
Actuator mechanism					Pressure garment joint Patent				
[NASA-CASE-GSC-11883-2]	c37	N77-15400			[NASA-CASE-XMS-09636]	c05	N71-12344		
Magnetic bearing system					Emergency escape system Patent				
[NASA-CASE-GSC-11978-1]	c37	N77-17464			[NASA-CASE-XMS-12086-1]	c05	N71-12345		
Method and apparatus for measuring web material wound on a reel					Dynamic Doppler simulator Patent				
[NASA-CASE-GSC-11902-1]	c38	N77-17495			[NASA-CASE-XMS-05454-1]	c07	N71-12391		
Detection of microbial infection in blood and antibiotic determinations					Electrical load protection device Patent				
[NASA-CASE-GSC-12045-1]	c52	N77-18733			[NASA-CASE-XMS-12135-1]	c09	N71-12526		
Logarithmic circuit with wide dynamic range					High voltage pulse generator Patent				
[NASA-CASE-GSC-12145-1]	c33	N77-19319			[NASA-CASE-XMS-12178-1]	c09	N71-13518		
Cyclical bi-directional rotary actuator					Process for conditioning tanned sharkskin and articles made therefrom Patent				
[NASA-CASE-GSC-11883-1]	c37	N77-19458			[NASA-CASE-XMS-09691-1]	c18	N71-15545		
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.									
LYNDON B. JOHNSON SPACE CENTER, HOUSTON, TEX.									
Coupling device					Ablation structures Patent				
[NASA-CASE-XMS-07846-1]	c09	N69-21927			[NASA-CASE-XMS-01816]	c33	N71-15623		
Flow test device					Fluid power transmission Patent				
[NASA-CASE-XMS-04917]	c14	N69-24257			[NASA-CASE-XMS-01445]	c12	N71-16031		
Visual target for retrofire attitude control					Spacecraft radiator cover Patent				
[NASA-CASE-XMS-12158-1]	c31	N69-27499			[NASA-CASE-XMS-12049]	c31	N71-16080		
System for monitoring signal amplitude ranges					Method of improving heat transfer characteristics in a nucleate boiling process Patent				
[NASA-CASE-XMS-04061-1]	c09	N69-39885			[NASA-CASE-XMS-04268]	c33	N71-16277		
Amplifier drift tester					Heated element fluid flow sensor Patent				
[NASA-CASE-XMS-05562-1]	c09	N69-39986			[NASA-CASE-XMS-12084-1]	c12	N71-17569		
System for improving signal-to-noise ratio of a communication signal Patent Application					Biological isolation garment Patent				
[NASA-CASE-XMS-12259-1]	c07	N70-12616			[NASA-CASE-XMS-12206-1]	c05	N71-17599		
Two-step rocket engine bipropellant valve Patent					Metal valve pintle with encapsulated elastomeric body Patent				
[NASA-CASE-XMS-04890-1]	c15	N70-22192			[NASA-CASE-XMS-12116-1]	c15	N71-17648		
Heat shield Patent					Method for forming plastic materials Patent				
[NASA-CASE-XMS-00486]	c33	N70-33344			[NASA-CASE-XMS-05516]	c15	N71-17803		
Shock absorbing support and restraint means Patent					Flexible blade antenna Patent				
[NASA-CASE-XMS-01240]	c05	N70-35152			[NASA-CASE-XMS-12101]	c09	N71-18720		
Energy absorbing structure Patent Application					Space suit heat exchanger Patent				
[NASA-CASE-XMS-12279-1]	c15	N70-35679			[NASA-CASE-XMS-09571]	c05	N71-19439		
Bonded solid lubricant coating Patent					Light intensity modulator controller Patent				
[NASA-CASE-XMS-00259]	c18	N70-36400			[NASA-CASE-XMS-04300]	c09	N71-19479		
Life preserver Patent					Solar optical telescope dome control system Patent				
[NASA-CASE-XMS-00864]	c05	N70-36493			[NASA-CASE-XMS-10966]	c14	N71-19568		
Resuscitation apparatus Patent					High temperature compositions Patent				
[NASA-CASE-XMS-01115]	c05	N70-39922			[NASA-CASE-XMS-00370]	c17	N71-20941		
Inflatable radar reflector unit Patent					Radiation detector readout system Patent				
[NASA-CASE-XMS-00893]	c07	N70-40063			[NASA-CASE-XMS-03478]	c14	N71-21040		
Measuring device Patent					Subgravity simulator Patent				
[NASA-CASE-XMS-01546]	c14	N70-40233			[NASA-CASE-XMS-04798]	c11	N71-21474		
Liquid-gas separator for zero gravity environment Patent					Shock absorber Patent				
[NASA-CASE-XMS-01492]	c05	N70-41297			[NASA-CASE-XMS-03722]	c15	N71-21530		
Instrument for use in performing a controlled Valsalva maneuver Patent					Apparatus for machining geometric cones Patent				
[NASA-CASE-XMS-01615]	c05	N70-41329			[NASA-CASE-XMS-04292]	c15	N71-22722		
Radial module space station Patent					Rescue litter flotation assembly Patent				
[NASA-CASE-XMS-01906]	c31	N70-41373			[NASA-CASE-XMS-04170]	c05	N71-22748		
Hypersonic reentry vehicle Patent					Aligning and positioning device Patent				
[NASA-CASE-XMS-04142]	c31	N70-41631			[NASA-CASE-XMS-04178]	c15	N71-22798		
Angular accelerometer Patent					Tension measurement device Patent				
[NASA-CASE-XMS-05936]	c14	N70-41682			[NASA-CASE-XMS-04545]	c15	N71-22878		
Indexed keyed connection Patent					Amplitude modulated laser transmitter Patent				
[NASA-CASE-XMS-02532]	c15	N70-41808			[NASA-CASE-XMS-04269]	c16	N71-22895		
Discrete local altitude sensing device Patent					Digital cardiometer system Patent				
[NASA-CASE-XMS-03792]	c14	N70-41812			[NASA-CASE-XMS-02399]	c05	N71-22896		
					Phonocardiograph transducer Patent				
					[NASA-CASE-XMS-05365]	c14	N71-22993		
					Multiple environment materials test chamber having a multiple port X-ray tube for irradiating a plurality of samples Patent				
					[NASA-CASE-XMS-02930]	c11	N71-23042		
					Soft frame adjustable eyeglasses Patent				
					[NASA-CASE-XMS-06064]	c05	N71-23096		

Blood pressure measuring system for separating and separately recording dc signal and an ac signal Patent			
[NASA-CASE-XMS-06061]	c05	N71-23317	
Signal ratio system utilizing vcltage controlled oscillators Patent			
[NASA-CASE-XMF-04367]	c09	N71-23545	
Winch having cable positicn and load indicators Patent			
[NASA-CASE-MSC-12052-1]	c15	N71-24599	
Radar antenna system for acquisitcn and tracking Patent			
[NASA-CASE-XMS-09610]	c07	N71-24625	
Extravehicular tunnel suit system Patent			
[NASA-CASE-MSC-12243-1]	c05	N71-24728	
Broadband modified turnstile antenna Patent			
[NASA-CASE-MSC-12209]	c09	N71-24842	
Quick release hook tape Patent			
[NASA-CASE-XMS-10660-1]	c15	N71-25975	
Plated electrodes Patent			
[NASA-CASE-XMS-04213-1]	c09	N71-26002	
Audio signal processor Patent			
[NASA-CASE-MSC-12223-1]	c07	N71-26181	
Fabric for micrometeoroid protection garment Patent			
[NASA-CASE-MSC-12109]	c18	N71-26285	
Antenna array phase quadrature tracking system Patent			
[NASA-CASE-MSC-12205-1]	c07	N71-27056	
Radiometric temperature reference Patent			
[NASA-CASE-MSC-13276-1]	c14	N71-27058	
Pneumatic amplifier Patent			
[NASA-CASE-MSC-12121-1]	c15	N71-27147	
Orbital escape device Patent			
[NASA-CASE-XMS-06162]	c31	N71-28851	
Inflatable tether Patent			
[NASA-CASE-XMS-10993]	c15	N71-28936	
Ion-exchange membrane with platinum electrode assembly Patent			
[NASA-CASE-XMS-02063]	c03	N71-29044	
Color television system			
[NASA-CASE-MSC-12146-1]	c07	N72-17109	
Current dependent filter inductance			
[NASA-CASE-ERC-10139]	c09	N72-17154	
Low onset rate energy absorber			
[NASA-CASE-MSC-12279]	c15	N72-17450	
Stand-off type ablative heat shield			
[NASA-CASE-MSC-12143-1]	c33	N72-17947	
Photographic film restoration system			
[NASA-CASE-MSC-12448-1]	c14	N72-20394	
Optical range finder having nonoverlapping complete images			
[NASA-CASE-MSC-12105-1]	c14	N72-21409	
Open type urine receptacle			
[NASA-CASE-MSC-12324-1]	c05	N72-22093	
Family of frequency to amplitude converters			
[NASA-CASE-MSC-12395]	c09	N72-25257	
Foldable construction block			
[NASA-CASE-MSC-12233-1]	c15	N72-25454	
Method and apparatus for detecting surface ions on silicon diodes and transistors			
[NASA-CASE-ERC-10325]	c15	N72-25457	
Scientific experiment flexible mount			
[NASA-CASE-MSC-12372-1]	c31	N72-25842	
Burn rate testing apparatus			
[NASA-CASE-XMS-09690]	c33	N72-25913	
System for improving signal-to-noise ratio of a communication signal			
[NASA-CASE-MSC-12259-2]	c07	N72-33146	
Altitude measuring system			
[NASA-CASE-ERC-10412-1]	c09	N73-12211	
A method of delivering a vehicle to earth orbit and returning the reusable portion thereof to earth			
[NASA-CASE-MSC-12391]	c30	N73-12884	
Multispectral imaging system			
[NASA-CASE-MSC-12404-1]	c23	N73-13661	
Foldable construction block			
[NASA-CASE-MSC-12233-2]	c32	N73-13921	
Space shuttle vehicle and system			
[NASA-CASE-MSC-12433]	c31	N73-14854	
Apparatus for statistical time-series analysis of electrical signals			
[NASA-CASE-MSC-12428-1]	c10	N73-25240	
Life raft stabilizer			
[NASA-CASE-MSC-12393-1]	c02	N73-26006	
On-film optical recording of camera lens settings			
[NASA-CASE-MSC-12363-1]	c14	N73-26431	
Powerplexer			
[NASA-CASE-MSC-12396-1]	c03	N73-31988	
Foot pedal operated fluid type exercising device			
[NASA-CASE-MSC-11561-1]	c05	N73-32014	
Digital to analog conversion apparatus			
[NASA-CASE-MSC-12458-1]	c08	N73-32081	
Solid state controller three axes controller			
[NASA-CASE-MSC-12394-1]	c08	N74-10942	
Method for obtaining oxygen from lunar or similar soil			
[NASA-CASE-MSC-12408-1]	c46	N74-13011	
Adaptive voting computer system			
[NASA-CASE-MSC-13932-1]	c62	N74-14920	
Phase protection system for ac power lines			
[NASA-CASE-MSC-17832-1]	c33	N74-14956	
Optical instruments			
[NASA-CASE-MSC-14096-1]	c74	N74-15095	
Multifunction audio digitizer			
[NASA-CASE-MSC-13855-1]	c35	N74-17885	
Method and apparatus for stable silicon dioxide layers on silicon grown in silicon nitride ambient			
[NASA-CASE-ERC-10073-1]	c24	N74-19769	
Pulse code modulated signal synchronizer			
[NASA-CASE-MSC-12462-1]	c32	N74-20809	
Pulse code modulated signal synchronizer			
[NASA-CASE-MSC-12494-1]	c32	N74-20810	
Apparatus and method for processing Korotkov sounds			
[NASA-CASE-MSC-13999-1]	c52	N74-26626	
Differential phase shift keyed communication system			
[NASA-CASE-MSC-14065-1]	c32	N74-26654	
Technique for recovery of voice data from heat damaged magnetic tape			
[NASA-CASE-MSC-14219-1]	c32	N74-27612	
Differential phase shift keyed signal resolver			
[NASA-CASE-MSC-14066-1]	c33	N74-27705	
Specific wavelength colorimeter			
[NASA-CASE-MSC-14081-1]	c35	N74-27860	
Latch mechanism			
[NASA-CASE-MSC-12549-1]	c37	N74-27903	
Digital communication system			
[NASA-CASE-MSC-13912-1]	c32	N74-30524	
Flexible joint for pressurizable garment			
[NASA-CASE-MSC-11072]	c54	N74-32546	
Method and apparatus for decoding compatible convolutional codes			
[NASA-CASE-MSC-14070-1]	c32	N74-32598	
Field sequential stereo television			
[NASA-CASE-MSC-12616-1]	c32	N74-32601	
Pulse stretcher for narrow pulses			
[NASA-CASE-MSC-14130-1]	c33	N74-32711	
Method and device for detection of surface discontinuities or defects			
[NASA-CASE-MSC-14187-1]	c35	N74-32879	
Fluid mass sensor			
[NASA-CASE-MSC-14653-1]	c35	N75-13218	
Anti-fog composition			
[NASA-CASE-MSC-13530-2]	c23	N75-14834	
Four phase logic systems			
[NASA-CASE-MSC-14240-1]	c33	N75-14957	
Lightweight electrically powered flexible thermal laminate			
[NASA-CASE-MSC-12662-1]	c24	N75-16635	
Peak holding circuit for extremely narrow pulses			
[NASA-CASE-MSC-14129-1]	c33	N75-18479	
Random pulse generator			
[NASA-CASE-MSC-14131-1]	c33	N75-19515	
Grain refinement control in TIG arc welding			
[NASA-CASE-MSC-19095-1]	c37	N75-19683	
Condensate removal device for heat exchanger			
[NASA-CASE-MSC-14143-1]	c77	N75-20139	
Television noise reduction device			
[NASA-CASE-MSC-12607-1]	c32	N75-21485	
Digital transmitter for data bus communications system			
[NASA-CASE-MSC-14558-1]	c32	N75-21486	
Thermal insulation attaching means			
[NASA-CASE-MSC-12619-1]	c39	N75-21671	
Insulated electrocardiographic electrodes			
[NASA-CASE-MSC-14339-1]	c05	N75-24716	
Iodine generator for reclaimed water purification			
[NASA-CASE-MSC-14632-1]	c54	N75-25594	
Variable ratio mixed-mode bilateral master-slave control system for shuttle remote manipulator system			
[NASA-CASE-MSC-14245-1]	c18	N75-27041	

Multiple circuit protector device [NASA-CASE-XMS-02744]	c33 N75-27249	[NASA-CASE-MSC-14903-1]	c27 N76-28425
Apparatus for welding sheet material [NASA-CASE-XMS-01330]	c37 N75-27376	Method of producing complex aluminum alloy parts of high temper, and products thereof [NASA-CASE-MSC-19693-1]	c26 N76-29401
Multiparameter vision testing apparatus [NASA-CASE-MSC-13601-2]	c54 N75-27759	Sun angle calculator [NASA-CASE-MSC-12617-1]	c35 N76-29552
Thrust measurement [NASA-CASE-XMS-05731]	c35 N75-29382	Meteoroid capture cell construction [NASA-CASE-MSC-12423-1]	c91 N76-30131
Fault tolerant clock apparatus utilizing a controlled minority of clock elements [NASA-CASE-MSC-12531-1]	c35 N75-30504	Adjustable securing base [NASA-CASE-MSC-19666-1]	c37 N76-31529
Low gravity phase separator [NASA-CASE-MSC-14773-1]	c31 N75-32262	Flanged major modular assembly jig [NASA-CASE-MSC-19372-1]	c39 N76-31562
Filter regeneration systems [NASA-CASE-MSC-14273-1]	c34 N75-33342	Optical noise suppression device and method [NASA-CASE-MSC-12640-1]	c74 N76-31998
Gas compression analysis [NASA-CASE-MSC-14757-1]	c37 N76-13496	Optical process for producing classification maps from multispectral data [NASA-CASE-MSC-14472-1]	c43 N77-10584
Spacecraft docking and alignment system [NASA-CASE-MSC-12559-1]	c18 N76-14186	Window defect planar mapping technique [NASA-CASE-MSC-19442-1]	c74 N77-10899
Reconstituted asbestos matrix [NASA-CASE-MSC-12568-1]	c24 N76-14204	Differential pulse code modulation [NASA-CASE-MSC-12506-1]	c32 N77-12239
Strain arrestor plate for fused silica tile [NASA-CASE-MSC-14182-1]	c27 N76-14264	Receiving and tracking phase modulated signals [NASA-CASE-MSC-16170-1]	c32 N77-12248
Medical subject monitoring systems [NASA-CASE-MSC-14180-1]	c52 N76-14757	Stator rotor tools [NASA-CASE-MSC-16000-1]	c07 N77-13062
Automatic bio waste sampling [NASA-CASE-MSC-14640-1]	c54 N76-14804	Hearing aid malfunction detection system [NASA-CASE-MSC-14916-1]	c33 N77-13335
Method for manufacturing mirrors in zero gravity environment [NASA-CASE-MSC-12611-1]	c12 N76-15189	Shielded conductor cable system [NASA-CASE-MSC-12745-1]	c33 N77-13338
Ceramic fiber insulating material and methods of producing same [NASA-CASE-MSC-14795-1]	c27 N76-15314	Process for producing flame resistant polyamides and products produced thereby [NASA-CASE-MSC-16074-1]	c27 N77-14262
Cosmic dust analyzer [NASA-CASE-MSC-13802-2]	c35 N76-15431	Method and system for in vivo measurement of bone tissue using a two level energy source [NASA-CASE-MSC-14276-1]	c52 N77-14737
High visibility air sea rescue panel [NASA-CASE-MSC-12564-1]	c54 N76-15792	Dual frequency circularly polarized microwave integrated antenna [NASA-CASE-MSC-16100-1]	c32 N77-15233
Insulation for piping [NASA-CASE-MSC-19523-1]	c31 N76-16245	Positive isolation disconnect [NASA-CASE-MSC-16043-1]	c37 N77-15397
Low distortion receiver for bi-level baseband PCM waveforms [NASA-CASE-MSC-14557-1]	c32 N76-16249	Analysis of volatile organic compounds [NASA-CASE-MSC-14428-1]	c23 N77-17161
Frequency measurement by coincidence detection with standard frequency [NASA-CASE-MSC-14649-1]	c33 N76-16331	System for producing chroma signals [NASA-CASE-MSC-14683-1]	c74 N77-18893
Pyrolysis system and process [NASA-CASE-MSC-12669-1]	c44 N76-16621	Multi-purpose wind tunnel reaction control model block [NASA-CASE-MSC-19706-1]	c09 N77-19077
Space vehicle system [NASA-CASE-MSC-12561-1]	c18 N76-17185	Bit error rate measurement above and below bit rate tracking threshold [NASA-CASE-MSC-12743-1]	c32 N77-19290
Method of fluxless brazing and diffusion bonding of aluminum containing components [NASA-CASE-MSC-14435-1]	c37 N76-18455	Phase array antenna control [NASA-CASE-MSC-14939-1]	c33 N77-19320
Optical conversion method [NASA-CASE-MSC-12618-1]	c74 N76-18917	Fluid mass sensor for a zero gravity environment [NASA-CASE-MSC-14653-1]	c35 N77-19385
Auger attachment method for insulation [NASA-CASE-MSC-12615-1]	c37 N76-19437	Sequencing device utilizing planetary gear set [NASA-CASE-MSC-19514-1]	c37 N77-19459
Position determination systems [NASA-CASE-MSC-12593-1]	c17 N76-21250	Portable breathing system [NASA-CASE-MSC-16182-1]	c54 N77-21847
Two-component ceramic coating for silica insulation [NASA-CASE-MSC-14270-1]	c27 N76-22377	Thermal insulation protection means [NASA-CASE-MSC-12737-1]	c34 N77-22423
A process of forming catalytic surfaces for oxidation reactions [NASA-CASE-MSC-14831-1]	c25 N76-23387	Mechanical sequencer [NASA-CASE-MSC-19536-1]	c37 N77-22482
Three-component ceramic coating for silica insulation [NASA-CASE-MSC-14270-2]	c27 N76-23426	Unbalanced quadriphase demodulator [NASA-CASE-MSC-14840-1]	c32 N77-24331
Flexible pile thermal barrier seal [NASA-CASE-MSC-19568-1]	c37 N76-23585	Open loop digital frequency multiplier [NASA-CASE-MSC-12709-1]	c33 N77-24375
Binary concatenated coding system [NASA-CASE-MSC-14082-1]	c60 N76-23850	Water system virus detection [NASA-CASE-MSC-16098-1]	c51 N77-24755
Non-flammable elastomeric fiber from a fluorinated elastomer and containing an halogenated flame retardant [NASA-CASE-MSC-14331-1]	c27 N76-24405	Non-floating universal joint [NASA-CASE-MSC-19546-1]	c37 N77-25536
Flame retardant elastomeric compositions [NASA-CASE-MSC-14331-2]	c27 N76-24408	Platinum resistance thermometer circuit [NASA-CASE-MSC-12327-1]	c35 N77-27368
Flame retardant elastomeric compositions [NASA-CASE-MSC-14331-3]	c27 N76-24409	Surface finishing [NASA-CASE-MSC-12631-1]	c24 N77-28225
Self-contained breathing apparatus [NASA-CASE-MSC-14733-1]	c54 N76-24900	Pressure modulating valve [NASA-CASE-MSC-14905-1]	c37 N77-28487
A condition sensor system and method [NASA-CASE-MSC-14805-1]	c35 N76-26448	Snap-in compressible biomedical electrode [NASA-CASE-MSC-14623-1]	c52 N77-28717
Fluid valve assembly [NASA-CASE-MSC-12731-1]	c37 N76-26511	Surface finishing [NASA-CASE-MSC-12631-2]	c05 N77-31131
A logic-controlled occlusive cuff system [NASA-CASE-MSC-14836-1]	c52 N76-27839	Thermal insulation attaching means [NASA-CASE-MSC-12619-2]	c16 N77-31237
Heat resistant polymers of oxidized styrylphosphine		An interactive color display for multispectral imager using correlation clustering [NASA-CASE-MSC-16253-1]	c43 N77-31583
		Process for removing sulfur dioxide from gas streams [NASA-CASE-MSC-16299-1]	c45 N77-31668

SOURCE INDEX

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. CONTD

Lead regulating latch
[NASA-CASE-KSC-19535-1] c37 N77-32499

Regenerable device for scrubbing breathable air
of CO2 and moisture without special heat
exchanger equipment
[NASA-CASE-KSC-14771-1] c54 N77-32722

**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. JOHN
F. KENNEDY SPACE CENTER, CCCOA BEACH, FLA.**

Device for determining the accuracy of the flare
on a flared tube
[NASA-CASE-KSC-03495] c14 N69-39785

Quick attach and release fluid coupling assembly
Patent
[NASA-CASE-KSC-01985] c15 N71-10782

Parasitic probe antenna Patent
[NASA-CASE-KSC-09348] c09 N71-13521

Electronic checkout system for space vehicles
Patent
[NASA-CASE-KSC-08012-2] c31 N71-15566

Apparatus for tensile testing Patent
[NASA-CASE-KSC-06250] c14 N71-15600

Weatherproof helix antenna Patent
[NASA-CASE-KSC-08485] c07 N71-19493

Valve seat with resilient support member Patent
[NASA-CASE-KSC-02582] c15 N71-21234

Diode and protection fuse unit Patent
[NASA-CASE-KSC-03381] c09 N71-22796

Optical monitor panel Patent
[NASA-CASE-KSC-03509] c14 N71-23175

Separation simulator Patent
[NASA-CASE-KSC-04631] c10 N71-23663

Controlled release device Patent
[NASA-CASE-KSC-03338] c15 N71-24043

Phonocardiogram simulator Patent
[NASA-CASE-KSC-10804] c05 N71-24606

VFP/UHF parasitic probe antenna Patent
[NASA-CASE-KSC-09340] c07 N71-24614

BCD to decimal decoder Patent
[NASA-CASE-KSC-06167] c08 N71-24890

Flammability test chamber Patent
[NASA-CASE-KSC-10126] c11 N71-24985

Video sync processor Patent
[NASA-CASE-KSC-10002] c10 N71-25865

Weld preparation machine Patent
[NASA-CASE-KSC-07953] c15 N71-26134

Validation device for spacecraft checkout
equipment Patent
[NASA-CASE-KSC-10543] c07 N71-26292

Internal work light Patent
[NASA-CASE-KSC-05932] c09 N71-26787

Emergency escape system Patent
[NASA-CASE-KSC-07814] c15 N71-27067

Voltage dropout sensor Patent
[NASA-CASE-KSC-10020] c10 N71-27338

Autoignition test cell Patent
[NASA-CASE-KSC-10198] c11 N71-28629

Protective suit having an audio transceiver Patent
[NASA-CASE-KSC-10164] c07 N71-33108

Ripple indicator
[NASA-CASE-KSC-10162] c09 N72-11225

High speed photo-optical time recording
[NASA-CASE-KSC-10294] c14 N72-18411

High speed direct binary-to-binary coded decimal
converter
[NASA-CASE-KSC-10326] c08 N72-21197

Automatic frequency control loop including
synchronous switching circuits
[NASA-CASE-KSC-10393] c09 N72-21247

Universal environment package with sectional
component housing
[NASA-CASE-KSC-10031] c15 N72-22486

Buffered analog converter
[NASA-CASE-KSC-10397] c08 N72-25206

Lamp modulator
[NASA-CASE-KSC-10565] c09 N72-25250

Cable stabilizer for open shaft cable operated
elevators
[NASA-CASE-KSC-10513] c15 N72-25453

Pressurized lighting system
[NASA-CASE-KSC-10644] c09 N72-27227

High speed direct binary to binary coded decimal
converter and scaler
[NASA-CASE-KSC-10595] c08 N73-12176

Geysering inhibitor for vertical cryogenic
transfer pipe
[NASA-CASE-KSC-10615] c15 N73-12486

Electronic video editor
[NASA-CASE-KSC-10003] c10 N73-13235

Character indicating display device
[NASA-CASE-KSC-00348] c09 N73-14215

Collapsible high gain antenna
[NASA-CASE-KSC-10392] c07 N73-26117

Floating baffle to improve efficiency of liquid
transfer from tanks
[NASA-CASE-KSC-10639] c15 N73-26472

Zero gravity liquid transfer screen
[NASA-CASE-KSC-10626] c14 N73-27378

Optical rotational sensor
[NASA-CASE-KSC-10752-1] c15 N73-27407

Television multiplexing system
[NASA-CASE-KSC-10654-1] c07 N73-30115

Lightning tracking system
[NASA-CASE-KSC-10729-1] c09 N73-32110

Rocket borne instrument to measure electric
fields inside electrified clouds
[NASA-CASE-KSC-10730-1] c14 N73-32318

Electric field measuring and display system
[NASA-CASE-KSC-10731-1] c33 N74-27862

Digital servo controller
[NASA-CASE-KSC-10769-1] c33 N74-29556

Signal conditioner test set
[NASA-CASE-KSC-10750-1] c35 N75-12270

Variable resistance constant tension and
lubrication device
[NASA-CASE-KSC-10723-1] c37 N75-13265

Voltage monitoring system
[NASA-CASE-KSC-10736-1] c33 N75-19521

Lightning current measuring systems
[NASA-CASE-KSC-10807-1] c33 N75-26246

Dual digital video switcher
[NASA-CASE-KSC-10782-1] c33 N75-30431

Compact bi-phase pulse coded modulation decoder
[NASA-CASE-KSC-10834-1] c33 N76-14371

Percutaneous connector device
[NASA-CASE-KSC-10849-1] c52 N77-14738

Illumination control apparatus for compensating
solar light
[NASA-CASE-KSC-11010-1] c44 N77-15493

Fiber optic multiplex optical transmission system
[NASA-CASE-KSC-11047-1] c74 N77-15826

Microcomputerized electric field meter
diagnostic and calibration system
[NASA-CASE-KSC-11035-1] c33 N77-20343

Remote lightning monitor system
[NASA-CASE-KSC-11031-1] c33 N77-21319

Lightning current waveform measuring system
[NASA-CASE-KSC-11018-1] c33 N77-21320

Digital automatic gain amplifier
[NASA-CASE-KSC-11008-1] c33 N77-21321

Ocean thermal plant
[NASA-CASE-KSC-11034-1] c44 N77-21666

Flame-resistant liquid oxygen compatible
neoprene rubber composition
[NASA-CASE-KSC-11020-1] c27 N77-23267

Magnetic electrical connectors for biomedical
percutaneous implants
[NASA-CASE-KSC-11030-1] c52 N77-25772

Cable fault locator
[NASA-CASE-KSC-10899-1] c33 N77-28394

Rotational joint assembly for the prosthetic leg
[NASA-CASE-KSC-11004-1] c54 N77-30749

**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
LANGLEY RESEARCH CENTER, LANGLEY STATION, VA.**

Jet shoes
[NASA-CASE-XLA-08491] c05 N69-21380

Condenser - Separator
[NASA-CASE-XLA-08645] c15 N69-21465

Connector - Electrical
[NASA-CASE-XLA-01288] c09 N69-21470

A support technique for vertically oriented
launch vehicles
[NASA-CASE-XLA-02704] c11 N69-21540

Electromagnetic mirror drive system
[NASA-CASE-XLA-03724] c14 N69-27461

Evaporant holder
[NASA-CASE-XLA-03105] c15 N69-27483

Compensating radiometer
[NASA-CASE-XLA-04556] c14 N69-27484

Tubular coupling having frangible connecting means
[NASA-CASE-XLA-02854] c15 N69-27490

Fatigue-resistant shear pin
[NASA-CASE-XLA-09122] c15 N69-27505

Ablation sensor
[NASA-CASE-XLA-01781] c14 N69-39975

Aeroflexible structures
[NASA-CASE-XLA-06095] c01 N69-39981

Transient-compensated SCR inverter [NASA-CASE-XLA-08507]	c09 N69-39984	Production of high purity silicon carbide Patent [NASA-CASE-XLA-00158]	c26 N70-36805
Capacitor power pak Patent Application [NASA-CASE-LPR-10367-1]	c03 N70-26817	Airplane take-off performance indicator Patent [NASA-CASE-XLA-00100]	c14 N70-36807
Disk pack cleaning table Patent Application [NASA-CASE-LPR-10590-1]	c15 N70-26819	Aerodynamic measuring device Patent [NASA-CASE-XLA-00481]	c14 N70-36824
Folding apparatus Patent [NASA-CASE-XLA-00137]	c15 N70-33180	Aircraft wheel spray drag alleviator Patent [NASA-CASE-XLA-01583]	c02 N70-36825
Infrared scanner Patent [NASA-CASE-XLA-00120]	c21 N70-33181	Attitude orientation of spin-stabilized space vehicles Patent [NASA-CASE-XLA-00281]	c21 N70-36943
Reentry vehicle leading edge Patent [NASA-CASE-XLA-00165]	c31 N70-33242	Continuously operating induction plasma accelerator Patent [NASA-CASE-XLA-01354]	c25 N70-36946
Motion picture camera for optical pyrometry Patent [NASA-CASE-XLA-00062]	c14 N70-33254	Check valve assembly for a probe Patent [NASA-CASE-XLA-00128]	c15 N70-37925
Variable sweep wing configuration Patent [NASA-CASE-XLA-00230]	c02 N70-33255	Space capsule Patent [NASA-CASE-XLA-00149]	c31 N70-37938
Variable sweep wing aircraft Patent [NASA-CASE-XLA-00221]	c02 N70-33266	Sandwich panel construction Patent [NASA-CASE-XLA-00349]	c33 N70-37979
Plasma accelerator Patent [NASA-CASE-XLA-00675]	c25 N70-33267	Reflector space satellite Patent [NASA-CASE-XLA-00138]	c31 N70-37981
Survival couch Patent [NASA-CASE-XLA-00118]	c05 N70-33285	Variable-geometry winged reentry vehicle Patent [NASA-CASE-XLA-00241]	c31 N70-37986
Landing arrangement for aerial vehicles Patent [NASA-CASE-XLA-00142]	c02 N70-33286	Vehicle parachute and equipment jettison system Patent [NASA-CASE-XLA-00195]	c02 N70-38009
Wind tunnel airstream oscillating apparatus Patent [NASA-CASE-XLA-00112]	c11 N70-33287	Landing arrangement for aerospace vehicle Patent [NASA-CASE-XLA-00805]	c31 N70-38010
Hydrofoil Patent [NASA-CASE-XLA-00229]	c12 N70-33305	Antenna system using parasitic elements and two driven elements at 90 deg angle fed 180 deg out of phase Patent [NASA-CASE-XLA-00414]	c07 N70-38200
High intensity heat and light unit Patent [NASA-CASE-XLA-00141]	c09 N70-33312	Deepin weight release Patent [NASA-CASE-XLA-00679]	c15 N70-38601
Particle detection apparatus Patent [NASA-CASE-XLA-00135]	c14 N70-33322	Manned space station Patent [NASA-CASE-XLA-00258]	c31 N70-38676
Runway light Patent [NASA-CASE-XLA-00119]	c11 N70-33329	Missile stage separation indicator and stage initiator Patent [NASA-CASE-XLA-00791]	c03 N70-39930
Spherical solid-propellant rocket motor Patent [NASA-CASE-XLA-00105]	c28 N70-33331	Apparatus for producing high purity silicon carbide crystals Patent [NASA-CASE-XLA-02057]	c26 N70-40015
Jet aircraft configuration Patent [NASA-CASE-XLA-00087]	c02 N70-33332	Miniature vibration isolator Patent [NASA-CASE-XLA-01019]	c15 N70-40156
Aerial capsule emergency separation device Patent [NASA-CASE-XLA-00115]	c03 N70-33343	Aircraft instrument Patent [NASA-CASE-XLA-00487]	c14 N70-40157
Nozzle Patent [NASA-CASE-XLA-00154]	c28 N70-33374	Radiation direction detector including means for compensating for photocell aging Patent [NASA-CASE-XLA-00183]	c14 N70-40239
Air frame drag balance Patent [NASA-CASE-XLA-00113]	c14 N70-33386	Passive communication satellite Patent [NASA-CASE-XLA-00210]	c30 N70-40309
Flexible foam erectable space structures Patent [NASA-CASE-XLA-00686]	c31 N70-34135	Electrostatic plasma modulator for space vehicle re-entry communication Patent [NASA-CASE-XLA-01400]	c07 N70-41331
Nose gear steering system for vehicle with main skids Patent [NASA-CASE-XLA-01804]	c02 N70-34160	Micrometeoroid velocity measuring device Patent [NASA-CASE-XLA-00495]	c14 N70-41332
Surface roughness detector Patent [NASA-CASE-XLA-00203]	c14 N70-34161	Method of obtaining permanent record of surface flow phenomena Patent [NASA-CASE-XLA-01353]	c14 N70-41366
Variable-span aircraft Patent [NASA-CASE-XLA-00166]	c02 N70-34178	Means for communicating through a layer of ionized gases Patent [NASA-CASE-XLA-01127]	c07 N70-41372
Dynamic precession damper for spin stabilized vehicles Patent [NASA-CASE-XLA-01989]	c21 N70-34295	Quick release separation mechanism Patent [NASA-CASE-XLA-01441]	c15 N70-41679
Erectable modular space station Patent [NASA-CASE-XLA-00678]	c31 N70-34296	Flexible wing deployment device Patent [NASA-CASE-XLA-01220]	c02 N70-41863
Electric-arc heater Patent [NASA-CASE-XLA-00330]	c33 N70-34540	Self-sealing, unbonded, rocket motor nozzle closure Patent [NASA-CASE-XLA-02651]	c28 N70-41967
Ac power amplifier Patent Application [NASA-CASE-LAR-10218-1]	c09 N70-34559	Fatigue testing device Patent [NASA-CASE-XLA-02131]	c32 N70-42003
Method and apparatus for producing a plasma Patent [NASA-CASE-XLA-00147]	c25 N70-34661	Techniques for insulating cryogenic fuel containers Patent [NASA-CASE-XLA-01967]	c31 N70-42015
Gas actuated bolt disconnect Patent [NASA-CASE-XLA-00326]	c03 N70-34667	Double hinged flap Patent [NASA-CASE-XLA-01290]	c02 N70-42016
Logarithmic converter Patent [NASA-CASE-XLA-00471]	c08 N70-34778	Spacecraft separation system for spinning vehicles and/or payloads Patent [NASA-CASE-XLA-02132]	c31 N71-10582
Mandrel for shaping solid propellant rocket fuel into a motor casing Patent [NASA-CASE-XLA-00304]	c27 N70-34783	Method for molding compounds Patent [NASA-CASE-XLA-01091]	c15 N71-10672
Impact simulator Patent [NASA-CASE-XLA-00493]	c11 N70-34786	Automatic force measuring system Patent [NASA-CASE-XLA-02605]	c14 N71-10773
Accelerometer with FM output Patent [NASA-CASE-XLA-00492]	c14 N70-34799	Gas analyzer for bi-gaseous mixtures Patent [NASA-CASE-XLA-01131]	c14 N71-10774
Frangible tube energy dissipation Patent [NASA-CASE-XLA-00754]	c15 N70-34850	Multiple input radio receiver Patent [NASA-CASE-XLA-00901]	c07 N71-10775
Landing arrangement for aerial vehicle Patent [NASA-CASE-XLA-00806]	c02 N70-34858		
Method and apparatus for shock protection Patent [NASA-CASE-XLA-00482]	c15 N70-36409		
Inflatable honeycomb Patent [NASA-CASE-XLA-00204]	c32 N70-36536		
Thermal control of space vehicles Patent [NASA-CASE-XLA-01291]	c33 N70-36617		
Foam generator Patent [NASA-CASE-XLA-00838]	c03 N70-36778		
Parachute glider Patent [NASA-CASE-XLA-00892]	c02 N70-36804		

Rotating space station simulator Patent
[NASA-CASE-XLA-03127] c11 N71-10776

Composite powerplant and shroud therefor Patent
[NASA-CASE-XLA-01043] c28 N71-10780

All-directional fastener Patent
[NASA-CASE-XLA-01807] c15 N71-10799

Hot air balloon deceleration and recovery system Patent
[NASA-CASE-XLA-06824-2] c02 N71-11037

Control for flexible parawing Patent
[NASA-CASE-XLA-06958] c02 N71-11038

Variable sweep aircraft Patent
[NASA-CASE-XLA-03659] c02 N71-11041

Translating horizontal tail Patent
[NASA-CASE-XLA-08801-1] c02 N71-11043

Space suit pressure stabilizer Patent
[NASA-CASE-XLA-05332] c05 N71-11194

Equipotential space suit Patent
[NASA-CASE-XLA-10007-1] c05 N71-11195

Recovery of potable water from human wastes in below-G conditions Patent
[NASA-CASE-XLA-03213] c05 N71-11207

Process for interfacial polymerization of pyromellitic dianhydride and 1,2,4,5-tetraamino-benzene Patent
[NASA-CASE-XLA-03704] c06 N71-11235

Imidazopyrrolone/imide copolymers Patent
[NASA-CASE-XLA-08802] c06 N71-11238

Adaptive compression of communication signals Patent
[NASA-CASE-XLA-03076] c07 N71-11266

Reentry communication by material addition Patent
[NASA-CASE-XLA-01552] c07 N71-11284

Cooperative Doppler radar system Patent
[NASA-CASE-LAR-10403] c21 N71-11766

Supersonic aircraft Patent
[NASA-CASE-XLA-04451] c02 N71-12243

Umbilical disconnect Patent
[NASA-CASE-XLA-00711] c03 N71-12258

Remote controlled tubular disconnect Patent
[NASA-CASE-XLA-01396] c03 N71-12259

Backpack carrier Patent
[NASA-CASE-LAR-10056] c05 N71-12351

Optical communications system Patent
[NASA-CASE-XLA-01090] c07 N71-12389

Analog to digital converter Patent
[NASA-CASE-XLA-00670] c08 N71-12501

Integrated time shared instrumentation display Patent
[NASA-CASE-XLA-01952] c08 N71-12507

SCR blocking pulse gate amplifier Patent
[NASA-CASE-XLA-07497] c09 N71-12514

Minimum induced drag airfoil body Patent
[NASA-CASE-XLA-00755] c01 N71-13410

Minimum induced drag airfoil body Patent
[NASA-CASE-XLA-05828] c01 N71-13411

Mechanical stability augmentation system Patent
[NASA-CASE-XLA-06339] c02 N71-13422

Automatic balancing device Patent
[NASA-CASE-LAR-10774] c10 N71-13545

Quick release connector Patent
[NASA-CASE-XLA-01141] c15 N71-13789

Spacecraft experiment pointing and attitude control system Patent
[NASA-CASE-XLA-05464] c21 N71-14132

Pressurized cell micrometeoroid detector Patent
[NASA-CASE-XLA-00936] c14 N71-14996

Crossed-field MHD plasma generator/accelerator Patent
[NASA-CASE-XLA-03374] c25 N71-15562

Adjustable attitude guide device Patent
[NASA-CASE-XLA-07911] c15 N71-15571

Control system for rocket vehicles Patent
[NASA-CASE-XLA-01163] c21 N71-15582

Excessive temperature warning system Patent
[NASA-CASE-XLA-01926] c14 N71-15620

Alleviation of divergence during rocket launch Patent
[NASA-CASE-XLA-00256] c31 N71-15663

Space capsule Patent
[NASA-CASE-XLA-01332] c31 N71-15664

Variable geometry manned orbital vehicle Patent
[NASA-CASE-XLA-03691] c31 N71-15674

Payload/burned-out motor case separation system Patent
[NASA-CASE-XLA-05369] c31 N71-15687

Velocity package Patent
[NASA-CASE-XLA-01339] c31 N71-15692

File card marker Patent
[NASA-CASE-XLA-02705] c08 N71-15908

Hypersonic test facility Patent
[NASA-CASE-XLA-00378] c11 N71-15925

Test unit free-flight suspension system Patent
[NASA-CASE-XLA-00939] c11 N71-15926

Reduced gravity simulator Patent
[NASA-CASE-XLA-01787] c11 N71-16028

Method of coating carbonaceous base to prevent oxidation destruction and coated base Patent
[NASA-CASE-XLA-00284] c15 N71-16075

Method of coating carbonaceous base to prevent oxidation destruction and coated base Patent
[NASA-CASE-XLA-00302] c15 N71-16077

Separator Patent
[NASA-CASE-XLA-00415] c15 N71-16079

Omnidirectional multiple impact landing system Patent
[NASA-CASE-XLA-09881] c31 N71-16085

Flexible ring slosh damping baffle Patent
[NASA-CASE-LAR-10317-1] c32 N71-16103

Buoyant anti-slosh system Patent
[NASA-CASE-XLA-04605] c32 N71-16106

Detector panels-micrometeoroid impact Patent
[NASA-CASE-XLA-05906] c31 N71-16221

Wind velocity probing device and method Patent
[NASA-CASE-XLA-02081] c20 N71-16281

Vibrating structure displacement measuring instrument Patent
[NASA-CASE-XLA-03135] c32 N71-16428

Viscous-pendulum-damper Patent
[NASA-CASE-XLA-02079] c12 N71-16894

Leak detector Patent
[NASA-CASE-LAR-10323-1] c12 N71-17573

Logic AND gate for fluid circuits Patent
[NASA-CASE-XLA-07391] c12 N71-17579

Contour surveying system Patent
[NASA-CASE-XLA-08646] c14 N71-17586

Cable arrangement for rigid tethering Patent
[NASA-CASE-XLA-02332] c32 N71-17609

Thermal pump-compressor for space use Patent
[NASA-CASE-XLA-00377] c33 N71-17610

Viscous pendulum damper Patent
[NASA-CASE-LAR-10274-1] c14 N71-17626

Self supporting space vehicle Patent
[NASA-CASE-XLA-00117] c31 N71-17680

Technique for control of free-flight rocket vehicles Patent
[NASA-CASE-XLA-00937] c31 N71-17691

Hydraulic grip Patent
[NASA-CASE-XLA-05100] c15 N71-17696

Heat protection apparatus Patent
[NASA-CASE-XLA-00892] c33 N71-17897

Thermopile vacuum gage tube simulator Patent
[NASA-CASE-XLA-02758] c14 N71-18481

Ionization vacuum gauge with all but the end of the ion collector shielded Patent
[NASA-CASE-XLA-07424] c14 N71-18482

Safe-arm initiator Patent
[NASA-CASE-LAR-10372] c09 N71-18599

Controlled glass head peening Patent
[NASA-CASE-XLA-07390] c15 N71-18616

Exclusive-Or digital logic module Patent
[NASA-CASE-XLA-07732] c08 N71-18751

Slosh alleviator Patent
[NASA-CASE-XLA-05749] c15 N71-19569

Dosimeter for high levels of absorbed radiation Patent
[NASA-CASE-XLA-03645] c14 N71-20430

Flow field simulation Patent
[NASA-CASE-LAR-11138] c12 N71-20436

Variable pulse width multiplier Patent
[NASA-CASE-XLA-02850] c09 N71-20447

Means for measuring the electron density gradients of the plasma sheath formed around a space vehicle Patent
[NASA-CASE-XLA-06232] c25 N71-20563

Null device for hand controller Patent
[NASA-CASE-XLA-01808] c15 N71-20740

Event recorder Patent
[NASA-CASE-XLA-01832] c14 N71-21006

Inflatable support structure Patent
[NASA-CASE-XLA-01731] c32 N71-21045

Fast opening diaphragm Patent
[NASA-CASE-XLA-03660] c15 N71-21060

Ellipsograph for pantograph Patent
[NASA-CASE-XLA-03102] c14 N71-21079

Random function tracer Patent
[NASA-CASE-XLA-01401] c15 N71-21119

Method and apparatus for bonding a plastics sleeve onto a metallic body Patent		Strain coupled servo control system Patent	
[NASA-CASE-XLA-01262]	c15 N71-21404	[NASA-CASE-XLA-08530]	c32 N71-25360
Hypersonic test facility Patent		Method of temperature compensating semiconductor strain gages Patent	
[NASA-CASE-XLA-05378]	c11 N71-21475	[NASA-CASE-XLA-04555-1]	c14 N71-25892
Multilegged support system Patent		Method for improving the signal-to-noise ratio of the Wheatstone bridge type bolometer Patent	
[NASA-CASE-XLA-01326]	c11 N71-21481	[NASA-CASE-XLA-02810]	c14 N71-25901
Nozzle afterbody for jet engines Patent		Method of plating copper on aluminum Patent	
[NASA-CASE-XLA-10450]	c28 N71-21493	[NASA-CASE-XLA-08966-1]	c17 N71-25903
Canister closing device Patent		Laser calibrator Patent	
[NASA-CASE-XLA-01446]	c15 N71-21528	[NASA-CASE-XLA-03410]	c16 N71-25914
Ablation sensor Patent		Thermal protection ablation spray system Patent	
[NASA-CASE-XLA-01794]	c33 N71-21586	[NASA-CASE-XLA-04251]	c18 N71-26100
Self-repeating plasma generator having communicating annular and linear arc discharge passages Patent		Direct lift control system Patent	
[NASA-CASE-XLA-03103]	c25 N71-21693	[NASA-CASE-XLA-10249-1]	c02 N71-26110
Attitude control and damping system for spacecraft Patent		Light shield and infrared reflector for fatigue testing Patent	
[NASA-CASE-XLA-02551]	c21 N71-21708	[NASA-CASE-XLA-01782]	c14 N71-26136
Method of making inflatable honeycomb Patent		Dual resonant cavity absorption cell Patent	
[NASA-CASE-XLA-03492]	c15 N71-22713	[NASA-CASE-XLA-10305]	c14 N71-26137
Lunar penetrometer Patent		Resilience testing device Patent	
[NASA-CASE-XLA-00934]	c14 N71-22765	[NASA-CASE-XLA-08254]	c14 N71-26161
Thermal control wall panel Patent		Precipitation detector Patent	
[NASA-CASE-XLA-01243]	c33 N71-22792	[NASA-CASE-XLA-02619]	c10 N71-26334
Attitude sensor for space vehicles Patent		Instrument for measuring the dynamic behavior of liquids Patent	
[NASA-CASE-XLA-00793]	c21 N71-22880	[NASA-CASE-XLA-05541]	c12 N71-26387
Omnidirectional microwave spacecraft antenna Patent		Arbitrarily shaped model survey system Patent	
[NASA-CASE-XLA-03114]	c09 N71-22888	[NASA-CASE-XLA-10098]	c32 N71-26681
Thermal control panel Patent		Dielectric molding apparatus Patent	
[NASA-CASE-XLA-07728]	c33 N71-22890	[NASA-CASE-XLA-10121-1]	c15 N71-26721
Spacecraft airlock Patent		Method of making a solid propellant rocket motor Patent	
[NASA-CASE-XLA-02050]	c31 N71-22968	[NASA-CASE-XLA-04126]	c28 N71-26779
Station keeping of a gravity gradient stabilized satellite Patent		Dynamic vibration absorber Patent	
[NASA-CASE-XLA-03132]	c31 N71-22969	[NASA-CASE-XLA-10083-1]	c15 N71-27006
Semi-linear ball bearing Patent		Rate augmented digital to analog converter Patent	
[NASA-CASE-XLA-02809]	c15 N71-22982	[NASA-CASE-XLA-07828]	c08 N71-27057
Heat sensing instrument Patent		High speed flight vehicle control Patent	
[NASA-CASE-XLA-01551]	c14 N71-22989	[NASA-CASE-XLA-08967]	c02 N71-27088
Ablation sensor Patent		Suspended mass impact damper Patent	
[NASA-CASE-XLA-01791]	c14 N71-22991	[NASA-CASE-XLA-10193-1]	c15 N71-27146
Self-calibrating displacement transducer Patent		Active vibration isolator for flexible bodies Patent	
[NASA-CASE-XLA-00781]	c09 N71-22999	[NASA-CASE-XLA-10106-1]	c15 N71-27169
Lateral displacement system for separated rocket stages Patent		Soldering device Patent	
[NASA-CASE-XLA-04804]	c31 N71-23008	[NASA-CASE-XLA-08911]	c15 N71-27214
Thermal control coating Patent		Fringe counter for interferometers Patent	
[NASA-CASE-XLA-01995]	c18 N71-23047	[NASA-CASE-XLA-10204]	c14 N71-27215
Method of making an inflatable panel Patent		Wideband VCO with high phase stability Patent	
[NASA-CASE-XLA-03497]	c15 N71-23052	[NASA-CASE-XLA-03893]	c10 N71-27271
Variable duration pulse integrator Patent		Plural position switch status and operativeness checker Patent	
[NASA-CASE-XLA-01219]	c10 N71-23084	[NASA-CASE-XLA-08799]	c10 N71-27272
Impact energy absorber Patent		Angular displacement indicating gas bearing support system Patent	
[NASA-CASE-XLA-01530]	c14 N71-23092	[NASA-CASE-XLA-09346]	c15 N71-28740
Micrometeoroid penetration measuring device Patent		Solid state thermal control polymer coating Patent	
[NASA-CASE-XLA-00941]	c14 N71-23240	[NASA-CASE-XLA-01745]	c33 N71-28903
Combined optical attitude and altitude indicating instrument Patent		Specialized halogen generator for purification of water Patent	
[NASA-CASE-XLA-01907]	c14 N71-23268	[NASA-CASE-XLA-08913]	c14 N71-28933
Scalar sensor having coarse and fine sensing with matched preirradiated cells and method of selecting cells Patent		Optical communications system Patent	
[NASA-CASE-XLA-01584]	c14 N71-23269	[NASA-CASE-XLA-01090]	c16 N71-28963
Variable width pulse integrator Patent		Antenna design for surface wave suppression Patent	
[NASA-CASE-XLA-03356]	c10 N71-23315	[NASA-CASE-XLA-10772]	c07 N71-28980
Leading edge curvature based on convective heating Patent		Analogue to digital converter tester Patent	
[NASA-CASE-XLA-01486]	c01 N71-23497	[NASA-CASE-XLA-06713]	c14 N71-28991
Measurement of time differences between luminous events Patent		Method of making pressurized panel Patent	
[NASA-CASE-XLA-01987]	c23 N71-23976	[NASA-CASE-XLA-08916]	c15 N71-29018
Method for measuring the characteristics of a gas Patent		Maksutov spectrograph Patent	
[NASA-CASE-XLA-03375]	c16 N71-24074	[NASA-CASE-XLA-10402]	c14 N71-29041
Laser grating interferometer Patent		Two component bearing Patent	
[NASA-CASE-XLA-04295]	c16 N71-24170	[NASA-CASE-XLA-00013]	c15 N71-29136
Automatic fatigue test temperature programmer Patent		Digital pulse width selection circuit Patent	
[NASA-CASE-XLA-02059]	c33 N71-24276	[NASA-CASE-XLA-07788]	c09 N71-29139
Ring wing tension vehicle Patent		Magnetically controlled plasma accelerator Patent	
[NASA-CASE-XLA-04901]	c31 N71-24315	[NASA-CASE-XLA-00327]	c25 N71-29184
Process for applying black coating to metals Patent		Boring bar drive mechanism Patent	
[NASA-CASE-XLA-06199]	c15 N71-24875	[NASA-CASE-XLA-03661]	c15 N71-33518
Velocity limiting safety system Patent		Wind tunnel model damper Patent	
[NASA-CASE-XLA-07473]	c15 N71-24895	[NASA-CASE-XLA-09480]	c11 N71-33612
		Variable geometry rotor system	
		[NASA-CASE-XLA-10557]	c02 N72-11018
		Flared tube strainer	
		[NASA-CASE-XLA-05056]	c15 N72-11389

Impact measuring technique [NASA-CASE-LAR-10913]	c14 N72-16282	Active air cushion control system minimizing vertical cushion response [NASA-CASE-LAR-10531-1]	c02 N73-13023
Technique of duplicating fragile core [NASA-CASE-XLA-07829]	c15 N72-16329	Logical function generator [NASA-CASE-XLA-05099]	c09 N73-13209
Tube fabricating process [NASA-CASE-LAR-10203-1]	c15 N72-16330	Ferry system [NASA-CASE-LAR-10574-1]	c11 N73-13257
Air bearing [NASA-CASE-WLP-10002]	c15 N72-17451	Flow velocity and directional instrument [NASA-CASE-LAR-10855-1]	c14 N73-13415
Extensometer frame [NASA-CASE-XLA-10322]	c15 N72-17452	Vortex breech high pressure gas generator [NASA-CASE-LAR-10549-1]	c31 N73-13898
Split range transducer [NASA-CASE-XLA-11189]	c10 N72-20222	Structural panel [NASA-CASE-LAR-11052-1]	c32 N73-13929
Stereo photomicrography system [NASA-CASE-LAR-10176-1]	c14 N72-20380	Method of detecting oxygen in a gas [NASA-CASE-LAR-10668-1]	c06 N73-16106
Radar calibration sphere [NASA-CASE-XLA-11154]	c07 N72-21117	Combustion detector [NASA-CASE-LAR-10739-1]	c14 N73-16484
Recorder using selective noise filter [NASA-CASE-ERC-10112]	c07 N72-21119	Laser communication system for controlling several functions at a location remote to the laser [NASA-CASE-LAR-10311-1]	c16 N73-16536
Stacked array of omnidirectional antennas [NASA-CASE-LAR-10545-1]	c09 N72-21244	Apparatus for photographing meteors [NASA-CASE-LAR-10226-1]	c14 N73-19419
Electro-mechanical sine/cosine generator [NASA-CASE-LAR-10503-1]	c09 N72-21248	Zero gravity liquid mixer [NASA-CASE-LAR-10195-1]	c15 N73-19458
Fast scan control for deflection type mass spectrometers [NASA-CASE-LAR-10766-1]	c14 N72-21432	Cascade plug nozzle [NASA-CASE-LAR-10951-1]	c28 N73-19819
Lathe tool bit and holder for machining fiberglass materials [NASA-CASE-XLA-10470]	c15 N72-21489	Rate data encoder [NASA-CASE-LAR-10128-1]	c08 N73-20217
Pressure operated electrical switch responsive to a pressure decrease after a pressure increase [NASA-CASE-LAR-10137-1]	c09 N72-22204	Function generator for synthesizing complex vibration mode patterns [NASA-CASE-LAR-10310-1]	c10 N73-20253
Variable geometry wind tunnels [NASA-CASE-XLA-07430]	c11 N72-22246	Infrared horizon locator [NASA-CASE-LAR-10726-1]	c14 N73-20475
Magnifying scratch gage force transducer [NASA-CASE-LAR-10496-1]	c14 N72-22437	Electrical resistance spot welding and brazing techniques for metal bonding [NASA-CASE-LAR-11072-1]	c15 N73-20535
Star image motion compensator [NASA-CASE-LAR-10523-1]	c14 N72-22444	Light intensity strain analysis [NASA-CASE-LAR-10765-1]	c32 N73-20740
Absolute focus lock for microscopes [NASA-CASE-LAR-10184]	c14 N72-22445	Anti-meteoroid device [NASA-CASE-LAR-10788-1]	c31 N73-20880
Cryogenic feedthrough [NASA-CASE-LAR-10031]	c15 N72-22484	Apparatus and method for generating large mass flow of high temperature air at hypersonic speeds [NASA-CASE-LAR-10578-1]	c12 N73-25262
A technique for breaking ice in the path of a ship [NASA-CASE-LAR-10815-1]	c16 N72-22520	Cable restraint [NASA-CASE-LAR-10129-1]	c15 N73-25512
One hand backpack harness [NASA-CASE-LAR-10102-1]	c05 N72-23085	Quiet jet transport aircraft [NASA-CASE-LAR-11087-1]	c02 N73-26008
Method and apparatus for mapping the sensitivity of the face of a photodetector specifically a PMT [NASA-CASE-LAR-10320-1]	c09 N72-23172	Electronic strain-level counter [NASA-CASE-LAR-10756-1]	c32 N73-26910
Omnidirectional slot antenna for mounting on cylindrical space vehicle [NASA-CASE-LAR-10163-1]	c09 N72-25247	Nondestructive spot test method for magnesium and magnesium alloys [NASA-CASE-LAR-10953-1]	c17 N73-27446
Hall effect transducer [NASA-CASE-LAR-10620-1]	c09 N72-25255	Ablation article and method [NASA-CASE-LAR-10439-1]	c33 N73-27796
Radio frequency filter device [NASA-CASE-XLA-02609]	c09 N72-25256	Apparatus and method for generating large mass flow of high temperature air at hypersonic speeds [NASA-CASE-LAR-10612-1]	c12 N73-28144
Parametric amplifiers with idler circuit feedback [NASA-CASE-LAR-10253-1]	c09 N72-25258	Apparatus for aiding a pilot in avoiding a midair collision between aircraft [NASA-CASE-LAR-10717-1]	c21 N73-30641
Variable angle tube holder [NASA-CASE-LAR-10507-1]	c11 N72-25284	Exposure interlock for oscilloscope cameras [NASA-CASE-LAR-10319-1]	c14 N73-32322
Low mass truss structure [NASA-CASE-LAR-10546-1]	c11 N72-25287	Meteoroid detector [NASA-CASE-LAR-10483-1]	c14 N73-32327
Liquid waste feed system [NASA-CASE-LAR-10365-1]	c05 N72-27102	Totally confined explosive welding [NASA-CASE-LAR-10941-2]	c15 N73-32371
Microcircuit negative cutter [NASA-CASE-XLA-09843]	c15 N72-27485	Transmitting and reflecting diffuser [NASA-CASE-LAR-10385-3]	c23 N73-32538
Light regulator [NASA-CASE-LAR-10836-1]	c26 N72-27784	Lightweight, variable solidity knitted parachute fabric [NASA-CASE-LAR-10776-1]	c02 N74-10034
Linear explosive comparison [NASA-CASE-LAR-10800-1]	c33 N72-27959	Technique for extending the frequency range of digital dividers [NASA-CASE-LAR-10730-1]	c33 N74-10223
Spherical measurement device [NASA-CASE-XLA-06683]	c14 N72-28436	Fluid pressure amplifier and system [NASA-CASE-LAR-10868-1]	c33 N74-11050
Method of making semiconductor p-n junction stress and strain sensor [NASA-CASE-XLA-04980-2]	c14 N72-28438	Method of making pressure tight seal for super alloy [NASA-CASE-LAR-10170-1]	c37 N74-11301
Screened circuit capacitors [NASA-CASE-LAR-10294-1]	c26 N72-28762	Adjustable frequency response microphone [NASA-CASE-LAR-11170-1]	c32 N74-12843
Deposition apparatus [NASA-CASE-LAR-10541-1]	c15 N72-32487	System for calibrating pressure transducer [NASA-CASE-LAR-10910-1]	c35 N74-13132
Dielectric loaded aperture antenna [NASA-CASE-LAR-11084-1]	c09 N73-12216	Molding process for imidazopyrrolone polymers [NASA-CASE-LAR-10547-1]	c31 N74-13177
Lift balancing device [NASA-CASE-LAR-10348-1]	c11 N73-12264		
Air removal device [NASA-CASE-XLA-8914]	c15 N73-12492		
Nondestructive spot test method for titanium and titanium alloys [NASA-CASE-LAR-10539-1]	c17 N73-12547		

Lyophilized spore dispenser [NASA-CASE-LAR-10544-1]	c37 N74-13178	Noise suppressor [NASA-CASE-LAR-11141-1]	c07 N74-32418
Transmitting and reflecting diffuser [NASA-CASE-LAR-10385-2]	c70 N74-13436	Measuring probe position recorder [NASA-CASE-LAR-10806-1]	c35 N74-32877
Evacuated displacement compression molding [NASA-CASE-LAR-10782-1]	c31 N74-14133	Stagnation pressure probe [NASA-CASE-LAR-11139-1]	c35 N74-32878
Modification of one man life raft [NASA-CASE-LAR-10241-1]	c54 N74-14845	Molding apparatus [NASA-CASE-LAR-10489-2]	c31 N74-32920
Attitude sensor [NASA-CASE-LAR-10586-1]	c19 N74-15089	Remote fire stack igniter [NASA-CASE-MFS-21675-1]	c25 N74-33378
Mossbauer spectrometer radiation detector [NASA-CASE-LAR-11155-1]	c35 N74-15091	Open tube guideway for high speed air cushioned vehicles [NASA-CASE-LAR-10256-1]	c85 N74-34672
In situ transfer standard for ultrahigh vacuum gage calibration [NASA-CASE-LAR-10862-1]	c35 N74-15092	Fast scan control for deflection type mass spectrometers [NASA-CASE-LAR-11428-1]	c35 N74-34857
Dual measurement ablation sensor [NASA-CASE-LAR-10105-1]	c34 N74-15652	Miniature hydraulic actuator [NASA-CASE-LAR-11522-1]	c34 N74-34881
Ejectable underwater scud source recovery assembly [NASA-CASE-LAR-1C595-1]	c35 N74-16135	Apparatus for microbiological sampling [NASA-CASE-LAR-11069-1]	c35 N75-12272
Wind tunnel model and method [NASA-CASE-LAR-10812-1]	c09 N74-17955	Method of making an explosively welded scarf joint [NASA-CASE-LAR-11211-1]	c37 N75-12326
High field CdS detector for infrared radiation [NASA-CASE-LAR-11027-1]	c35 N74-18088	Determining particle density using known material Hugoniot curves [NASA-CASE-LAR-11059-1]	c76 N75-12810
Method of fabricating an article with cavities [NASA-CASE-LAR-10318-1]	c31 N74-18089	Method for making conductors for ferrite memory arrays [NASA-CASE-LAR-10994-1]	c24 N75-13032
Apparatus for remote handling of materials [NASA-CASE-LAR-1C634-1]	c37 N74-18123	Growth of gallium nitride crystals [NASA-CASE-LAR-11302-1]	c25 N75-13054
Method for compression molding of thermosetting plastics utilizing a temperature gradient across the plastic to cure the article [NASA-CASE-LAR-10489-1]	c31 N74-18124	Evacuated, displacement compression mold [NASA-CASE-LAR-10782-2]	c31 N75-13111
Method for determining thermo-physical properties of specimens [NASA-CASE-LAR-11053-1]	c25 N74-18551	Servo valve [NASA-CASE-LAR-11643-1]	c37 N75-13268
Anti-buckling fatigue test assembly [NASA-CASE-LAR-10426-1]	c09 N74-19528	Automatic inoculating apparatus [NASA-CASE-LAR-11074-1]	c51 N75-13502
Aromatic polyimide preparation [NASA-CASE-LAR-11372-1]	c27 N74-19772	Automatic focus control for facsimile cameras [NASA-CASE-LAR-11213-1]	c35 N75-15014
Reefing system [NASA-CASE-LAR-10129-2]	c37 N74-20063	Kinesthetic control simulator [NASA-CASE-LAR-10276-1]	c09 N75-15662
A synchronous binary array divider [NASA-CASE-ERC-10180-1]	c60 N74-20836	Electrostatic measurement system [NASA-CASE-MFS-22129-1]	c33 N75-18477
Orbital and entry tracking accessory for globes [NASA-CASE-LAR-10626-1]	c19 N74-21015	Automatic liquid inventory collecting and dispensing unit [NASA-CASE-LAR-11071-1]	c35 N75-19611
Digital controller for a Baum folding machine [NASA-CASE-LAR-10688-1]	c37 N74-21056	Vacuum leak detector [NASA-CASE-LAR-11237-1]	c35 N75-19612
Totally confined explosive welding [NASA-CASE-LAR-10941-1]	c37 N74-21057	Spectrometer integrated with a facsimile camera [NASA-CASE-LAR-11207-1]	c35 N75-19613
Method of fabricating an object with a thin wall having a precisely shaped slit [NASA-CASE-LAR-10409-1]	c31 N74-21059	Instrumentation for measurement of aircraft noise and sonic boom [NASA-CASE-LAR-11173-1]	c35 N75-19614
Deployable pressurized cell structure for a micrometeoroid detector [NASA-CASE-LAR-10295-1]	c35 N74-21062	Laser head for simultaneous optical pumping of several dye lasers [NASA-CASE-LAR-11341-1]	c36 N75-19655
Means for accommodating large overstrain in lead wires [NASA-CASE-LAR-10168-1]	c33 N74-22865	High lift aircraft [NASA-CASE-LAR-11252-1]	c05 N75-25914
Bonded joint and method [NASA-CASE-LAR-10900-1]	c37 N74-23064	Vapor phase growth of groups 3-5 compounds by hydrogen chloride transport of the elements [NASA-CASE-LAR-11144-1]	c25 N75-26043
Light shield and cooling apparatus [NASA-CASE-LAR-10089-1]	c34 N74-23066	Resonant waveguide stark cell [NASA-CASE-LAR-11352-1]	c33 N75-26245
Method of laminating structural members [NASA-CASE-XLA-11028-1]	c24 N74-27035	Fluid control apparatus and method [NASA-CASE-LAR-11110-1]	c34 N75-26282
Rocket having barium release system to create ion clouds in the upper atmosphere [NASA-CASE-LAR-10670-2]	c15 N74-27360	Electrolytic cell structure [NASA-CASE-LAR-11042-1]	c33 N75-27252
Apparatus for inserting and removing specimens from high temperature vacuum furnaces [NASA-CASE-LAR-10841-1]	c31 N74-27900	Rotating joint signal coupler [NASA-CASE-LAR-11264-1]	c33 N75-27261
Grinding arrangement for ball nose milling cutters [NASA-CASE-LAR-10450-1]	c37 N74-27905	Automatic microbial transfer device [NASA-CASE-LAR-11354-1]	c35 N75-27330
Method of repairing discontinuity in fiberglass structures [NASA-CASE-LAR-10416-1]	c24 N74-30001	A method of preparing aromatic polyimides having uniquely low softening temperatures [NASA-CASE-LAR-11828-1]	c23 N75-29181
Real time liquid crystal image converter [NASA-CASE-LAR-11206-1]	c74 N74-30118	Polyimide adhesives [NASA-CASE-LAR-11397-1]	c27 N75-29263
Deployable flexible ventral fins for use as an emergency spin recovery device in aircraft [NASA-CASE-LAR-1C753-1]	c08 N74-30421	Bonding method in the manufacture of continuous regression rate sensor devices [NASA-CASE-LAR-10337-1]	c24 N75-30260
Apparatus for applying simulator g-forces to an arm of an aircraft simulator pilot [NASA-CASE-LAR-10550-1]	c09 N74-30597	Varying density composite structure [NASA-CASE-LAR-11181-1]	c39 N75-31479
Centrifugal lyophobic separator [NASA-CASE-LAR-10194-1]	c34 N74-30608	Meteoroid impact position locator aid for manned space station [NASA-CASE-LAR-10629-1]	c35 N75-33367
Variably positioned guide vanes for aerodynamic choking [NASA-CASE-LAR-10642-1]	c07 N74-31270	Measurement of gas production of microorganisms [NASA-CASE-LAR-11326-1]	c35 N75-33368
		Self-supporting strain transducer [NASA-CASE-LAR-11263-1]	c35 N75-33369
		Smokestack mounted airfoil [NASA-CASE-LAR-11669-1]	c34 N76-13419

Annular momentum control device used for stabilization of space vehicles and the like [NASA-CASE-LAR-11051-1]	c15 N76-14158	Casting propellant in rocket engine [NASA-CASE-LAR-11995-1]	c28 N77-10213
Multichannel logarithmic RF level detector [NASA-CASE-LAR-11021-1]	c32 N76-14321	Anti-multipath digital signal detector [NASA-CASE-LAR-11827-1]	c32 N77-10392
Turnstile and flared cone UHF antenna [NASA-CASE-LAR-10970-1]	c33 N76-14372	Device for measuring the contour of a surface [NASA-CASE-LAR-11869-1]	c35 N77-10497
Static pressure probe [NASA-CASE-LAR-11552-1]	c35 N76-14429	Two wavelength double pulse tunable dye laser [NASA-CASE-LAR-12012-1]	c36 N77-10517
Horn antenna having V-shaped corrugated slots [NASA-CASE-LAR-11112-1]	c32 N76-15330	Weld-bonded titanium structures [NASA-CASE-LAR-11549-1]	c37 N77-11397
Ultrasonic calibration device [NASA-CASE-LAR-11435-1]	c35 N76-15432	Auxiliary power system for activity cooled aircraft [NASA-CASE-LAR-11626-1]	c34 N77-12332
Deploy/release system [NASA-CASE-LAR-11575-1]	c02 N76-16014	Phase modulating with odd and even finite power series of a modulating signal [NASA-CASE-LAR-11607-1]	c32 N77-14292
Clock setter [NASA-CASE-LAR-11458-1]	c35 N76-16392	Miniature biaxial strain transducer [NASA-CASE-LAR-11648-1]	c35 N77-14407
Heat exchanger system and method [NASA-CASE-LAR-10799-2]	c34 N76-17317	Precision alignment apparatus for cutting a workpiece [NASA-CASE-LAR-11658-1]	c37 N77-14478
Stack plume visualization system [NASA-CASE-LAR-11675-1]	c45 N76-17656	Aircraft design concept [NASA-CASE-LAR-11852-1]	c05 N77-15027
Cascade plug nozzle [NASA-CASE-LAR-11674-1]	c07 N76-18117	Apparatus and method for jet noise suppression [NASA-CASE-LAR-11903-1]	c07 N77-15036
Magnetic suspension and pointing system [NASA-CASE-LAR-11889-1]	c19 N76-18227	Composite sandwich lattice structure [NASA-CASE-LAR-11898-1]	c24 N77-15103
Exhaust flow deflector [NASA-CASE-LAR-11570-1]	c34 N76-18364	Polyimide adhesives [NASA-CASE-LAR-12181-1]	c27 N77-15192
Method and apparatus for tensile testing of metal foil [NASA-CASE-LAR-10208-1]	c35 N76-18400	A CV ultrasonic bolt tensioning monitor [NASA-CASE-LAR-12016-1]	c32 N77-15236
Method and apparatus for fluffing, separating, and cleaning fibers [NASA-CASE-LAR-11224-1]	c37 N76-18456	Solid propellant rocket motor and method of making same [NASA-CASE-LAR-1349]	c20 N77-17143
Therapeutic hand exerciser [NASA-CASE-LAR-11667-1]	c52 N76-19785	Magnetometer [NASA-CASE-LAR-11617-2]	c35 N77-17430
Magnetic heading reference [NASA-CASE-LAR-11387-1]	c04 N76-20114	A method for aerosol analysis by thermoluminescence [NASA-CASE-LAR-12046-1]	c45 N77-17609
Apparatus for positioning modular components on a vertical or overhead surface [NASA-CASE-LAR-11465-1]	c37 N76-21554	Automatically lockable axially extensible strut [NASA-CASE-LAR-11900-1]	c05 N77-18134
Airfoil shape for flight at subsonic speeds [NASA-CASE-LAR-10585-1]	c02 N76-22154	Particulate and solar radiation stable coating for spacecraft [NASA-CASE-LAR-10805-2]	c34 N77-18382
Two dimensional wedge/translating shroud nozzle [NASA-CASE-LAR-11919-1]	c07 N76-22202	Magnetic heading reference [NASA-CASE-LAR-11387-2]	c04 N77-19056
Particulate and aerosol detector [NASA-CASE-LAR-11434-1]	c35 N76-22509	Crosswind landing gear position indicator [NASA-CASE-LAR-11941-1]	c06 N77-20098
Thermal shock and erosion resistant tantalum carbide ceramic material [NASA-CASE-LAR-11902-1]	c27 N76-23436	Binocular device for displaying numerical information in field of view [NASA-CASE-LAR-11782-1]	c74 N77-20882
Air removal device [NASA-CASE-LAR-8914-2]	c34 N76-23522	Method of locating persons in distress [NASA-CASE-LAR-11390-1]	c32 N77-21467
Optical scanner [NASA-CASE-LAR-11711-1]	c74 N76-23985	Volumetric direct nuclear pumped laser [NASA-CASE-LAR-12183-1]	c36 N77-21424
High temperature strain gage calibration fixture [NASA-CASE-LAR-11500-1]	c35 N76-24523	Vortex attenuation method [NASA-CASE-LAR-12034-1]	c02 N77-22045
Vacuum pressure molding technique [NASA-CASE-LAR-10073-1]	c37 N76-24575	Thrust augmented spin recovery device [NASA-CASE-LAR-11970-1]	c08 N77-22147
Extreme temperature thermal control coating [NASA-CASE-LAR-11756-1]	c24 N76-26284	Composite lamination method [NASA-CASE-LAR-12019-1]	c24 N77-22179
Instrumentation for measuring aircraft noise and sonic boom [NASA-CASE-LAR-11476-1]	c07 N76-27232	Amplifying ribbon extensometer [NASA-CASE-LAR-11825-1]	c35 N77-22449
Connector [NASA-CASE-LAR-11709-1]	c37 N76-27567	Nondestructive method for instrumenting helicopter rotor blades [NASA-CASE-LAR-11201-1]	c35 N77-22452
Capillary flow weld-bonding [NASA-CASE-LAR-11726-1]	c37 N76-27568	Differential sound level meter [NASA-CASE-LAR-12106-1]	c35 N77-23441
TV fatigue crack monitoring system [NASA-CASE-LAR-11490-1]	c35 N76-28530	Method of forming shrink-fit compression seal [NASA-CASE-LAR-11563-1]	c37 N77-23482
Molded composite pyrogen igniter for rocket motors [NASA-CASE-LAR-12018-1]	c20 N76-29365	Collapsible corrugated horn antenna [NASA-CASE-LAR-11745-1]	c32 N77-24339
Detector absorptivity measuring method and apparatus [NASA-CASE-LAR-10907-1]	c35 N76-29551	Vortex generator for controlling the dispersion of effluents in a flowing liquid [NASA-CASE-LAR-12045-1]	c34 N77-24423
Supersonic transport [NASA-CASE-LAR-11932-1]	c05 N76-31219	Process for control of cell division [NASA-CASE-LAR-10773-3]	c51 N77-25769
Turbulence intensity indicator [NASA-CASE-LAR-11833-1]	c06 N76-31229	Composite sandwich lattice structure [NASA-CASE-LAR-11898-2]	c24 N77-26242
Method for detecting pollutants [NASA-CASE-LAR-11405-1]	c45 N76-31714	Electro-mechanical sine/cosine generator [NASA-CASE-LAR-11389-1]	c33 N77-26387
Improved solar heating system [NASA-CASE-LAR-12009-1]	c44 N76-32649	Apparatus for determining thermophysical properties of test specimens [NASA-CASE-LAR-11883-1]	c09 N77-27131
Zero gravity separator [NASA-CASE-LAR-10344-1]	c35 N76-33470	Lightweight structural columns [NASA-CASE-LAR-12095-1]	c39 N77-27432
Wingtip vortex dissipator for aircraft [NASA-CASE-LAR-11645-1]	c02 N77-10001	Automated single-slide staining device [NASA-CASE-LAR-11649-1]	c51 N77-27677
Nozzle extraction process and handlemeter for measuring handle [NASA-CASE-LAR-12147-1]	c27 N77-10198	Dual cycle aircraft turbine engine [NASA-CASE-LAR-11310-1]	c07 N77-28118

Remote water monitoring system [NASA-CASE-LAR-11973-1]	c43 N77-28563	[NASA-CASE-XLE-00298]	c22 N70-34501
Variable dihedral shuttle orbiter [NASA-CASE-LAR-10706-2]	c05 N77-31132	High temperature heat source Patent [NASA-CASE-XLE-00490]	c33 N70-34545
Vortex-lift roll-control device [NASA-CASE-LAR-11868-2]	c08 N77-31176	Gaseous nuclear rocket Patent [NASA-CASE-XLE-00321]	c22 N70-34572
A seat cushion to provide realistic acceleration cues for aircraft simulator pilots [NASA-CASE-IAR-12149-1]	c54 N77-31787	Simulated fuel assembly Patent [NASA-CASE-XLE-00724]	c14 N70-34669
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.			
LEWIS RESEARCH CENTER, CLEVELAND, OHIO.			
Pc11 seal [NASA-CASE-XLE-05130]	c15 N69-21362	Inlet deflector for jet engines Patent [NASA-CASE-XLE-00388]	c28 N70-34788
Fluid jet amplifier [NASA-CASE-XLE-03512]	c12 N69-21466	Radiant heater having formed filaments Patent [NASA-CASE-XLE-00387]	c33 N70-34812
Electrode and insulator with shielded dielectric junction [NASA-CASE-XLE-03778]	c09 N69-21542	Optical torque meter Patent [NASA-CASE-XLE-00503]	c14 N70-34818
Thin window, drifted silicon, charged particle detector [NASA-CASE-XLE-10529]	c14 N69-23191	Electric propulsion engine test chamber Patent [NASA-CASE-XLE-00252]	c11 N70-34844
Probes having ring and primary sensor at same potential to prevent collection of stray wall currents in ionized gases [NASA-CASE-XLE-00690]	c25 N69-39884	Conical valve plug Patent [NASA-CASE-XLE-00715]	c15 N70-34859
Ion thruster cathode [NASA-CASE-XLE-07087]	c06 N69-39889	Channel-type shell construction for rocket engines and the like Patent [NASA-CASE-XLE-00144]	c28 N70-34860
Superconducting alternator [NASA-CASE-XLE-02824]	c03 N69-39890	Non-reusable kinetic energy absorber Patent [NASA-CASE-XLE-00810]	c15 N70-34861
Triode thermionic energy converter [NASA-CASE-XLE-01015]	c03 N69-39898	High temperature testing apparatus Patent [NASA-CASE-XLE-00335]	c14 N70-35368
Slug flow magnetohydrodynamic generator [NASA-CASE-XLE-02083]	c03 N69-39983	Ion thruster cathode Patent Application [NASA-CASE-XLE-10814-1]	c28 N70-35422
Reduced gravity liquid configuration simulator [NASA-CASE-XLE-02624]	c12 N69-39988	Formed metal ribbon wrap Patent [NASA-CASE-XLE-00164]	c15 N70-36411
Transpiration cooled turbine blade manufactured from wires Patent [NASA-CASE-XLE-00020]	c15 N70-33226	Multistage multiple-reentry turbine Patent [NASA-CASE-XLE-00170]	c15 N70-36412
Rocket propellant injector Patent [NASA-CASE-XLE-00103]	c28 N70-33241	Fluid coupling Patent [NASA-CASE-XLE-00397]	c15 N70-36492
Modification and improvements to cooled blades Patent [NASA-CASE-XLE-00092]	c15 N70-33264	Injector-valve device Patent [NASA-CASE-XLE-00303]	c15 N70-36535
Colloid propulsion method and apparatus Patent [NASA-CASE-XLE-00817]	c28 N70-33265	Nickel-base alloy Patent [NASA-CASE-XLE-00283]	c17 N70-36616
High-vacuum condenser tank for ion rocket tests Patent [NASA-CASE-XLE-00168]	c11 N70-33278	Apparatus having coaxial capacitor structure for measuring fluid density Patent [NASA-CASE-XLE-00143]	c14 N70-36618
High temperature nickel-base alloy Patent [NASA-CASE-XLE-00151]	c17 N70-33283	Rocket thrust chamber Patent [NASA-CASE-XLE-00145]	c28 N70-36806
Annular rocket motor and nozzle configuration Patent [NASA-CASE-XLE-00078]	c28 N70-33284	Solid state power mapping instrument Patent [NASA-CASE-XLE-00301]	c14 N70-36808
Reinforced metallic composites Patent [NASA-CASE-XLE-02428]	c17 N70-33288	Ion rocket Patent [NASA-CASE-XLE-00376]	c28 N70-37245
Process for applying a protective coating for salt bath brazing Patent [NASA-CASE-XLE-00046]	c15 N70-33311	Annular supersonic decelerator or drogue Patent [NASA-CASE-XLE-00222]	c02 N70-37939
Wire grid forming apparatus Patent [NASA-CASE-XLE-00023]	c15 N70-33330	Rocket engine Patent [NASA-CASE-XLE-00342]	c28 N70-37980
Electro-thermal rocket Patent [NASA-CASE-XLE-00267]	c28 N70-33356	Variable sweep aircraft wing Patent [NASA-CASE-XLE-00350]	c02 N70-38011
External liquid-spray cooling of turbine blades Patent [NASA-CASE-XLE-00037]	c28 N70-33372	Apparatus for transferring cryogenic liquids Patent [NASA-CASE-XLE-00345]	c15 N70-38020
Apparatus for igniting solid propellants Patent [NASA-CASE-XLE-00207]	c28 N70-33375	Method of producing porous tungsten ionizers for ion rocket engines Patent [NASA-CASE-XLE-00455]	c28 N70-38197
Flexible seal for valves Patent [NASA-CASE-XLE-00101]	c15 N70-33376	Method of making fiber reinforced metallic composites Patent [NASA-CASE-XLE-00231]	c17 N70-38198
Apparatus for making a metal slurry product Patent [NASA-CASE-XLE-00010]	c15 N70-33382	Rocket engine injector Patent [NASA-CASE-XLE-00111]	c28 N70-38199
Energy conversion apparatus Patent [NASA-CASE-XLE-00212]	c03 N70-34134	Reinforced metallic composites Patent [NASA-CASE-XLE-00228]	c17 N70-38490
Enthalpy and stagnation temperature determination of a high temperature laminar flow gas stream Patent [NASA-CASE-XLE-00266]	c14 N70-34156	Rocket motor system Patent [NASA-CASE-XLE-00323]	c28 N70-38505
Electrothermal rockets having improved heat exchangers Patent [NASA-CASE-XLE-01783]	c28 N70-34175	Particle beam measurement apparatus using beam kinetic energy to change the heat sensitive resistance of the detection probe Patent [NASA-CASE-XLE-00243]	c14 N70-38602
Venting vapor apparatus Patent [NASA-CASE-XLE-00288]	c15 N70-34247	Penshape exhaust nozzle for supersonic engine Patent [NASA-CASE-XLE-00057]	c28 N70-38711
Electrostatic propulsion system with a direct nuclear electrogenerator Patent [NASA-CASE-XLE-00818]	c22 N70-34248	Multistage multiple-reentry turbine Patent [NASA-CASE-XLE-00085]	c28 N70-39895
Thrust vector control apparatus Patent [NASA-CASE-XLE-00208]	c28 N70-34294	Gas lubricant compositions Patent [NASA-CASE-XLE-00353]	c18 N70-39897
Nuclear reactor control rod assembly with improved driving mechanism Patent		Telescoping-spike supersonic inlet for aircraft engines Patent [NASA-CASE-XLE-00005]	c28 N70-39899
		High temperature spark plug Patent [NASA-CASE-XLE-00660]	c28 N70-39925
		Low viscosity magnetic fluid obtained by the colloidal suspension of magnetic particles Patent [NASA-CASE-XLE-01512]	c12 N70-40124
		Apparatus for absorbing and measuring power Patent [NASA-CASE-XLE-00720]	c14 N70-40201

Device for directionally controlling electromagnetic radiation Patent [NASA-CASE-XLE-01716] c09 N70-40234

Method for continuous variation of propellant flow and thrust in propulsive devices Patent [NASA-CASE-XLE-00177] c28 N70-40367

Apparatus for increasing ion engine beam density Patent [NASA-CASE-XLE-00519] c28 N70-41576

Foldable conduit Patent [NASA-CASE-XLE-00620] c32 N70-41579

Liquid storage tank venting device for zero gravity environment Patent [NASA-CASE-XLE-01449] c15 N70-41646

Method of making a regeneratively cooled combustion chamber Patent [NASA-CASE-XLE-00150] c28 N70-41818

Instrument for the quantitative measurement of radiation at multiple wave lengths Patent [NASA-CASE-XLE-00011] c14 N70-41946

Small rocket engine Patent [NASA-CASE-XLE-00685] c28 N70-41992

Apparatus for positioning and loading a test specimen Patent [NASA-CASE-XLE-01300] c15 N70-41993

Liquid flow sight assembly Patent [NASA-CASE-XLE-02998] c14 N70-42074

Inductive liquid level detection system Patent [NASA-CASE-XLE-01609] c14 N71-10500

Method of forming thin window drifted silicon charged particle detector Patent [NASA-CASE-XLE-00808] c24 N71-10560

Electrostatic thruster with improved insulators Patent [NASA-CASE-XLE-01902] c28 N71-10574

Thin-walled pressure vessel Patent [NASA-CASE-XLE-04677] c15 N71-10577

Method of making a silicon semiconductor device Patent [NASA-CASE-XLE-02792] c26 N71-10607

Metallic film diffusion for boundary lubrication Patent [NASA-CASE-XLE-01765] c18 N71-10772

Molecular beam velocity selector Patent [NASA-CASE-XLE-01533] c11 N71-10777

Meteoroid sensing apparatus having a coincidence network connected to a pair of capacitors Patent [NASA-CASE-XLE-01246] c14 N71-10797

Capacitor and method of making same Patent [NASA-CASE-XLE-10364-1] c09 N71-13522

Capillary radiator Patent [NASA-CASE-XLE-03307] c33 N71-14035

Electrostatic ion engine having a permanent magnetic circuit Patent [NASA-CASE-XLE-01124] c28 N71-14043

Split welding chamber Patent [NASA-CASE-XLE-11531] c15 N71-14932

Method and apparatus for making curved reflectors Patent [NASA-CASE-XLE-08917] c15 N71-15597

Method of making a diffusion bonded refractory coating Patent [NASA-CASE-XLE-01604-2] c15 N71-15610

Black-body furnace Patent [NASA-CASE-XLE-01399] c33 N71-15625

Method of igniting solid propellants Patent [NASA-CASE-XLE-01988] c27 N71-15634

Fluid dispensing apparatus and method Patent [NASA-CASE-XLE-01182] c27 N71-15635

Automatically deploying nozzle exit cone extension Patent [NASA-CASE-XLE-01640] c31 N71-15637

High temperature cobalt-base alloy Patent [NASA-CASE-XLE-00726] c17 N71-15644

Method of making a rocket motor casing Patent [NASA-CASE-XLE-00409] c28 N71-15658

Rocket motor casing Patent [NASA-CASE-XLE-05689] c28 N71-15659

Electrostatic ion rocket engine Patent [NASA-CASE-XLE-02066] c28 N71-15661

High temperature cobalt-base alloy Patent [NASA-CASE-XLE-02991] c17 N71-16025

Nickel-base alloy containing Mo-W-Al-Cr-Ta-Zr-C-Nb-B Patent [NASA-CASE-XLE-02082] c17 N71-16026

Method of improving the reliability of a rolling element system Patent [NASA-CASE-XLE-02999] c15 N71-16052

Process of casting heavy slips Patent [NASA-CASE-XLE-00106] c15 N71-16076

Boiler for generating high quality vapor Patent [NASA-CASE-XLE-00785] c33 N71-16104

Method of making self lubricating fluoride-metal composite materials Patent [NASA-CASE-XLE-08511-2] c18 N71-16105

Thrust and direction control apparatus Patent [NASA-CASE-XLE-03583] c31 N71-17629

Linear magnetic brake with two windings Patent [NASA-CASE-XLE-05079] c15 N71-17652

Method of lubricating rolling element bearings Patent [NASA-CASE-XLE-09527] c15 N71-17688

Hot wire liquid level detector for cryogenic fluids Patent [NASA-CASE-XLE-00454] c23 N71-17802

Pulsed differential comparator circuit Patent [NASA-CASE-XLE-03804] c10 N71-19471

Poll seal Patent [NASA-CASE-XLE-05130-2] c15 N71-19570

Generator for a space power system Patent [NASA-CASE-XLE-04250] c09 N71-20446

Method of making electrical contact on silicon solar cell and resultant product Patent [NASA-CASE-XLE-04787] c03 N71-20492

Small plasma probe Patent [NASA-CASE-XLE-02578] c25 N71-20747

Combined electrolysis device and fuel cell and method of operation Patent [NASA-CASE-XLE-01645] c03 N71-20904

Pressure monitoring with a plurality of ionization gauges controlled at a central location Patent [NASA-CASE-XLE-00787] c14 N71-21090

Control of transverse instability in rocket combustors Patent [NASA-CASE-XLE-04603] c33 N71-21507

High voltage divider system Patent [NASA-CASE-XLE-02008] c09 N71-21583

Plasma device feed system Patent [NASA-CASE-XLE-02902] c25 N71-21694

Burning rate control of solid propellants Patent [NASA-CASE-XLE-03494] c27 N71-21819

Protective device for machine and metalworking tools Patent [NASA-CASE-XLE-01092] c15 N71-22797

Cryogenic insulation system Patent [NASA-CASE-XLE-04222] c23 N71-22881

Method for producing fiber reinforced metallic composites Patent [NASA-CASE-XLE-03925] c18 N71-22894

Thermal shock apparatus Patent [NASA-CASE-XLE-02024] c14 N71-22964

Arc electrode of graphite with ball tip Patent [NASA-CASE-XLE-04788] c09 N71-22987

Gas purged dry box glove Patent [NASA-CASE-XLE-02531] c05 N71-23080

Automatic recording McLeod gauge Patent [NASA-CASE-XLE-03280] c14 N71-23093

Electronic cathode having a brush-like structure and a relatively thick oxide emissive coating Patent [NASA-CASE-XLE-04501] c09 N71-23190

High temperature ferromagnetic cobalt-base alloy Patent [NASA-CASE-XLE-03629] c17 N71-23248

Induction furnace with perforated tungsten foil shielding Patent [NASA-CASE-XLE-04026] c14 N71-23267

Gd or Sm doped silicon semiconductor composition Patent [NASA-CASE-XLE-10715] c26 N71-23292

Protection of serially connected solar cells against open circuits by the use of shunting diode Patent [NASA-CASE-XLE-04535] c03 N71-23354

Superconducting alternator Patent [NASA-CASE-XLE-02823] c09 N71-23443

Silicon solar cell with cover glass bonded to cell by metal pattern Patent [NASA-CASE-XLE-08569] c03 N71-23449

Analytical test apparatus and method for determining oxide content of alkali metal Patent [NASA-CASE-XLE-01997] c06 N71-23527

Thermionic converter with current augmented by self induced magnetic field Patent [NASA-CASE-XLE-01903] c22 N71-23599

Superconductor material and method of making same Patent			Pulse coupling circuit		
[NASA-CASE-XLE-02798]	c26	N71-23654	[NASA-CASE-LEW-10433-1]	c09	N72-22197
Insulation system Patent			Solid state remote circuit selector switch		
[NASA-CASE-XLE-02647]	c18	N71-23658	[NASA-CASE-LEW-10387]	c09	N72-22201
Self-lubricating fluoride metal composite materials Patent			Load-insensitive electrical device		
[NASA-CASE-XLE-08511]	c18	N71-23710	[NASA-CASE-XER-11046]	c09	N72-22203
Alloys for bearings Patent			High speed rolling element bearing		
[NASA-CASE-XLE-05033]	c15	N71-23810	[NASA-CASE-LEW-10856-1]	c15	N72-22490
Extrusion die for refractory metals Patent			Production of metal powders		
[NASA-CASE-XLE-06773]	c15	N71-23817	[NASA-CASE-XLE-06461]	c17	N72-22530
Combustion chamber Patent			Nickel base alloy		
[NASA-CASE-XLE-04857]	c28	N71-23968	[NASA-CASE-LEW-10874-1]	c17	N72-22535
Metallic film diffusion for boundary lubrication Patent			Ion thruster magnetic field control		
[NASA-CASE-XLE-10337]	c15	N71-24046	[NASA-CASE-LEW-10835-1]	c28	N72-22771
Process for producing dispersion strengthened nickel with aluminum Patent			Electrically conductive fluorocarbon polymer		
[NASA-CASE-XLE-06969]	c17	N71-24142	[NASA-CASE-XLE-06774-2]	c06	N72-25150
Thermal radiation shielding Patent			Analog Signal to Discrete Time Interval Converter (ASDTIC)		
[NASA-CASE-XLE-03432]	c33	N71-24145	[NASA-CASE-ERC-10048]	c09	N72-25251
Method of attaching a cover glass to a silicon solar cell Patent			Controllable load insensitive power converters		
[NASA-CASE-XLE-08569-2]	c03	N71-24681	[NASA-CASE-ERC-10268]	c09	N72-25252
Rocket engine injector Patent			Angular velocity and acceleration measuring apparatus		
[NASA-CASE-XLE-03157]	c28	N71-24736	[NASA-CASE-ERC-10292]	c14	N72-25410
Multialarm summary alarm Patent			Electrical insulating layer process		
[NASA-CASE-XLE-03061-1]	c10	N71-24798	[NASA-CASE-LEW-10489-1]	c15	N72-25447
Apparatus for making curved reflectors Patent			Method for producing dispersion strengthened alloys by converting metal to a halide, comminuting, reducing the metal halide to the metal and sintering		
[NASA-CASE-XLE-08917-2]	c15	N71-24936	[NASA-CASE-LEW-10450-1]	c15	N72-25448
Flow angle sensor and read out system Patent			Selective nickel deposition		
[NASA-CASE-XLE-04503]	c14	N71-24864	[NASA-CASE-LEW-10965-1]	c15	N72-25452
Shock tube powder dispersing apparatus Patent			Method of making fiber composites		
[NASA-CASE-XLE-04946]	c17	N71-24911	[NASA-CASE-LEW-10424-2-2]	c18	N72-25539
Pneumatic oscillator Patent			Electricity measurement devices employing liquid crystalline materials		
[NASA-CASE-LEW-10345-1]	c10	N71-25899	[NASA-CASE-ERC-10275]	c26	N72-25680
Heat activated cell with alkali anode and alkali salt electrolyte Patent			Ablative system		
[NASA-CASE-LEW-11358]	c03	N71-26084	[NASA-CASE-LEW-10359]	c33	N72-25911
Method of producing refractory composites containing tantalum carbide, hafnium carbide, and hafnium boride Patent			Inductance device with vacuum insulation		
[NASA-CASE-XLE-03940]	c18	N71-26153	[NASA-CASE-LEW-10330-1]	c09	N72-27226
Ion beam deflector Patent			Apparatus for sensing temperature		
[NASA-CASE-LEW-10689-1]	c28	N71-26173	[NASA-CASE-XLE-05230]	c14	N72-27410
Rolling element bearings Patent			Apparatus for producing metal powders		
[NASA-CASE-XLE-09527-2]	c15	N71-26189	[NASA-CASE-XLE-06461-2]	c17	N72-28535
Ion thruster accelerator system Patent			Refractory metal base alloy composites		
[NASA-CASE-LEW-10106-1]	c28	N71-26642	[NASA-CASE-XLE-03940-2]	c17	N72-28536
Propellant feed isolator Patent			Apparatus for producing high purity I-123		
[NASA-CASE-LEW-10210-1]	c28	N71-26781	[NASA-CASE-LEW-10518-2]	c24	N72-28714
Heat activated cell Patent			Spiral groove seal		
[NASA-CASE-LEW-11359]	c03	N71-28579	[NASA-CASE-XLE-10326-2]	c15	N72-29488
Process for glass coating an ion accelerator grid Patent			Production of high purity I-123		
[NASA-CASE-LEW-10278-1]	c15	N71-28582	[NASA-CASE-LEW-10518-1]	c24	N72-33681
Fluid jet amplifier Patent			Electrostatic collector for charged particles		
[NASA-CASE-XLE-09341]	c12	N71-28741	[NASA-CASE-LEW-11192-1]	c09	N73-13208
Gas core nuclear reactor Patent			Method of making apparatus for sensing temperature		
[NASA-CASE-LEW-10250-1]	c22	N71-28759	[NASA-CASE-XLE-05230-2]	c14	N73-13477
Gas turbine combustor Patent			Method of forming superalloys		
[NASA-CASE-LEW-10286-1]	c28	N71-28915	[NASA-CASE-LEW-10805-1]	c15	N73-13465
Cyclic switch Patent			Rocket thrust throttling system		
[NASA-CASE-LEW-10155-1]	c09	N71-29035	[NASA-CASE-LEW-10374-1]	c28	N73-13773
Temperature reducing coating for metals subject to flame exposure Patent			Gas turbine engine fuel control		
[NASA-CASE-XLE-00035]	c33	N71-29151	[NASA-CASE-LEW-11187-1]	c28	N73-19793
Liquid spray cooling method Patent			Thermocouple tape		
[NASA-CASE-XLE-00027]	c33	N71-29152	[NASA-CASE-LEW-11072-1]	c14	N73-24472
Turbo-machine blade vibration damper Patent			Method and apparatus for sputtering utilizing an apertured electrode and a pulsed substrate bias		
[NASA-CASE-XLE-00155]	c28	N71-29154	[NASA-CASE-LEW-10920-1]	c17	N73-24569
Corrosion resistant beryllium Patent			Magneto-plasma-dynamic arc thruster		
[NASA-CASE-LEW-10327]	c17	N71-33408	[NASA-CASE-LEW-11180-1]	c25	N73-25760
Integrated thermoelectric generator/space antenna combination			Ablative system		
[NASA-CASE-XER-09521]	c09	N72-12136	[NASA-CASE-LEW-10359-2]	c33	N73-25952
Sensing probe			Parasitic suppressing circuit		
[NASA-CASE-XER-10281-1]	c14	N72-17327	[NASA-CASE-ERC-10403-1]	c10	N73-26228
Method of making emf cell			Twisted multifilament superconductor		
[NASA-CASE-LEW-11359-2]	c03	N72-20034	[NASA-CASE-LEW-11726-1]	c26	N73-26752
Gaseous control system for nuclear reactors			Ophthalmic method and apparatus		
[NASA-CASE-XLE-04599]	c22	N72-20597	[NASA-CASE-LEW-11669-1]	c05	N73-27062
Switching regulator			Rocket propellant injection		
[NASA-CASE-LEW-11005-1]	c09	N72-21243	[NASA-CASE-LEW-11071-1]	c27	N73-27695
Saturation current protection apparatus for saturable core transformers			Single grid accelerator for an ion thruster		
[NASA-CASE-ERC-10075-2]	c09	N72-22196	[NASA-CASE-XLE-10453-2]	c28	N73-27699
			Preparation of polyimides from mixtures of monomeric diamines and esters of polycarboxylic acids		
			[NASA-CASE-LEW-11325-1]	c06	N73-27980
			Method and apparatus for measuring electromagnetic radiation		

SOURCE INDEX

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. CONTD

[NASA-CASE-LEW-11159-1] c14 N73-28488
Welding blades to rotors
[NASA-CASE-LEW-10533-1] c15 N73-28515
An ion exchange nuclear reactor
[NASA-CASE-LEW-11645-2] c22 N73-28660
Low mass rolling element for bearings
[NASA-CASE-LEW-11087-1] c15 N73-30458
Swirl can primary combustor
[NASA-CASE-LEW-11326-1] c23 N73-30665
Enhanced diffusion welding
[NASA-CASE-LEW-11388-1] c15 N73-32358
High speed hybrid bearing comprising a fluid bearing and a rolling bearing connected in series
[NASA-CASE-LEW-11152-1] c15 N73-32359
Nickel aluminide coated low alloy stainless steel
[NASA-CASE-LEW-11267-1] c17 N73-32414
Cobalt-base alloy
[NASA-CASE-LEW-10436-1] c17 N73-32415
Nuclear fuel elements
[NASA-CASE-XLE-00209] c22 N73-32528
Method of fabricating a twisted composite superconductor
[NASA-CASE-LEW-11015] c26 N73-32571
Space vehicle with artificial gravity and earth-like environment
[NASA-CASE-LEW-11101-1] c31 N73-32750
Production of hollow components for rolling element bearings by diffusion welding
[NASA-CASE-LEW-11026-1] c15 N73-33383
Electron beam controller
[NASA-CASE-LEW-11617-1] c33 N74-10195
Spiral groove seal
[NASA-CASE-LEW-10326-3] c37 N74-10474
Apparatus for producing high purity I-123
[NASA-CASE-LEW-10518-3] c31 N74-10476
Method of heat treating a formed powder product material
[NASA-CASE-LEW-10805-3] c26 N74-10521
Apparatus for welding blades to rotors
[NASA-CASE-LEW-10533-2] c37 N74-11300
High powered arc electrodes
[NASA-CASE-LEW-11162-1] c33 N74-12913
Method of forming articles of manufacture from superalloy powders
[NASA-CASE-LEW-10805-2] c37 N74-13179
Fine particulate capture device
[NASA-CASE-LEW-11583-1] c37 N74-13199
Deposition of alloy films
[NASA-CASE-LEW-11262-1] c27 N74-13270
Supersonic-combustion rocket
[NASA-CASE-LEW-11058-1] c20 N74-13502
Method of making silicon solar cell array
[NASA-CASE-LEW-11069-1] c44 N74-14784
Spiral groove seal
[NASA-CASE-XLE-10326-4] c37 N74-15125
Method of making rolling element bearings
[NASA-CASE-LEW-11087-2] c37 N74-15128
Gas turbine exhaust nozzle
[NASA-CASE-LEW-11569-1] c07 N74-15453
Demodulator for carrier transducers
[NASA-CASE-NUC-10107-1] c33 N74-17930
Diffusion welding in air
[NASA-CASE-LEW-11387-1] c37 N74-18128
Airflow control system for supersonic inlets
[NASA-CASE-LEW-11188-1] c02 N74-20646
Rapidly pulsed, high intensity, incoherent light source
[NASA-CASE-XLE-2529-3] c33 N74-20859
Electromagnetic flow rate meter
[NASA-CASE-LEW-10981-1] c35 N74-21018
Diffusion welding
[NASA-CASE-LEW-11388-2] c37 N74-21055
Journal bearings
[NASA-CASE-LEW-11076-1] c37 N74-21061
Glass-to-metal seals comprising relatively high expansion metals
[NASA-CASE-LEW-10698-1] c37 N74-21063
Hollow rolling element bearings
[NASA-CASE-LEW-11087-3] c37 N74-21064
Low level signal limiter
[NASA-CASE-XLE-04791] c32 N74-22096
Load insensitive electrical device
[NASA-CASE-XER-11046-2] c33 N74-22864
Reinforced structural plastics
[NASA-CASE-LEW-10199-1] c27 N74-23125
Jet exhaust noise suppressor
[NASA-CASE-LEW-11286-1] c07 N74-27490

High current electrical lead
[NASA-CASE-LEW-10950-1] c33 N74-27683
Magnetocaloric pump
[NASA-CASE-LEW-11672-1] c37 N74-27904
Supersonic fan blading
[NASA-CASE-LEW-11402-1] c07 N74-28226
Production of pure metals
[NASA-CASE-LEW-10906-1] c25 N74-30502
Sputtering holes with ion beamlets
[NASA-CASE-LEW-11646-1] c20 N74-31269
Method of electroforming a rocket chamber
[NASA-CASE-LEW-11118-1] c20 N74-32919
Journal Bearings
[NASA-CASE-LEW-11076-2] c37 N74-32921
Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LEW-12053-1] c27 N74-34579
Hall effect magnetometer
[NASA-CASE-LEW-11632-2] c35 N75-13213
Method of protecting the surface of a substrate
[NASA-CASE-LEW-11696-1] c37 N75-13261
Circuit for detecting initial systole and diastolic notch
[NASA-CASE-LEW-11581-1] c54 N75-13531
Insulation foil and method of making
[NASA-CASE-LEW-11484-2] c24 N75-14839
Method of making dish ion thruster grids
[NASA-CASE-LEW-11694-1] c20 N75-18310
Duplex aluminized coatings
[NASA-CASE-LEW-11696-2] c26 N75-19408
Heat exchanger
[NASA-CASE-LEW-12252-1] c34 N75-19579
A heat exchanger and method of making
[NASA-CASE-LEW-12441-1] c34 N75-19580
High speed, self-acting shaft seal
[NASA-CASE-LEW-11274-1] c37 N75-21631
High power laser apparatus and system
[NASA-CASE-XLE-2529-2] c36 N75-27364
Combination automatic-starting electrical plasma torch and gas shutoff valve
[NASA-CASE-XLE-10717] c37 N75-29426
Flow measuring apparatus
[NASA-CASE-LEW-12078-1] c35 N75-30503
Lubricated journal bearing
[NASA-CASE-LEW-11076-3] c37 N75-30562
Protected isotope heat source
[NASA-CASE-LEW-11227-1] c73 N75-30876
Drilled ball bearing with a one piece anti-tipping cage assembly
[NASA-CASE-LEW-11925-1] c37 N75-31446
Method of making an insulation foil
[NASA-CASE-LEW-11484-1] c24 N75-33181
Ophthalmic liquifaction pump
[NASA-CASE-LEW-12051-1] c52 N75-33640
Controlled separation combustor
[NASA-CASE-LEW-11593-1] c20 N76-14190
Rocket chamber and method of making
[NASA-CASE-LEW-11118-2] c20 N76-14191
Shock position sensor for supersonic inlets
[NASA-CASE-LEW-11915-1] c35 N76-14431
Apparatus for forming dish ion thruster grids
[NASA-CASE-LEW-11694-2] c37 N76-14461
Covered silicon solar cells and method of manufacture
[NASA-CASE-LEW-11065-2] c44 N76-14600
Solar cell surface treatment
[NASA-CASE-LEW-11330-1] c44 N76-14612
High temperature beryllium oxide capacitor
[NASA-CASE-LEW-11938-1] c33 N76-15373
Thermocouple tape
[NASA-CASE-LEW-11072-2] c35 N76-15434
Fluid journal bearings
[NASA-CASE-LEW-11076-4] c37 N76-15461
Selective coating for solar panels
[NASA-CASE-LEW-12159-1] c44 N76-15603
Deuterium pass through target
[NASA-CASE-LEW-11866-1] c72 N76-15860
Fused silicide coatings containing discrete particles for protecting niobium alloys
[NASA-CASE-LEW-11179-1] c27 N76-16229
Tantalum modified ferritic iron base alloys
[NASA-CASE-LEW-12095-1] c26 N76-17233
Method of forming metal hydride films
[NASA-CASE-LEW-12083-1] c26 N76-18262
Process for making anhydrous metal halides
[NASA-CASE-LEW-11860-1] c37 N76-18458

Thermocouples of niobium and iridium alloys for more stable vacuum-high temperature performance	[NASA-CASE-LEW-12174-1]	c35 N76-19407	[NASA-CASE-LEW-12232-1]	c07 N77-18160
Flexible formulated plastic separators for alkaline batteries	[NASA-CASE-LEW-12363-1]	c44 N76-19552	Device for the detection of phenol and related compounds	[NASA-CASE-LEW-12513-1]
Fuel combustor	[NASA-CASE-LEW-12137-1]	c20 N76-20215	In-situ laser retorting of oil shale	[NASA-CASE-LEW-12217-1]
Closed loop spray cooling apparatus	[NASA-CASE-LEW-11981-1]	c37 N76-20486	Formulated plastic separators for soluble electrode cells	[NASA-CASE-LEW-12358-1]
Counter pumping debris excluder and separator	[NASA-CASE-LEW-11855-1]	c37 N76-20487	Leading edge protection for composite blades	[NASA-CASE-LEW-12550-1]
Circumferential shaft seal	[NASA-CASE-LEW-12119-1]	c37 N76-20488	Method of making reinforced composite structure	[NASA-CASE-LEW-12619-1]
Method of constructing dished ion thruster grids to provide hole array spacing compensation	[NASA-CASE-LEW-11876-1]	c20 N76-21276	Solar cell assembly	[NASA-CASE-LEW-11549-1]
Splash groove fuel injector	[NASA-CASE-LEW-12417-1]	c07 N76-22198	Anode for ion thruster	[NASA-CASE-LEW-12048-1]
Bearing material	[NASA-CASE-LEW-11930-1]	c24 N76-22309	Zirconium modified nickel-copper alloy	[NASA-CASE-LEW-12245-1]
Atomic hydrogen storage method and apparatus	[NASA-CASE-LEW-12081-1]	c28 N76-22399	Flow compensating pressure regulator	[NASA-CASE-LEW-12718-1]
Fluid seal for rotating shafts	[NASA-CASE-LEW-11676-1]	c37 N76-22541	Reduced chromium stainless steel alloys	[NASA-CASE-LEW-12543-1]
Thermal barrier coating system	[NASA-CASE-LEW-12554-1]	c24 N76-23359	Gels as battery separators for soluble electrode cells	[NASA-CASE-LEW-12364-1]
Method of making an apertured casting	[NASA-CASE-LEW-11169-1]	c37 N76-23570	Method for producing solar energy panels by automation	[NASA-CASE-LEW-12541-1]
Multi-cell battery protection system	[NASA-CASE-LEW-12039-1]	c44 N76-23713	Oil cooling system for a gas turbine engine	[NASA-CASE-LEW-12830-1]
Improved tissue macerating instrument	[NASA-CASE-LEW-12668-1]	c52 N76-23837	High toughness-high strength iron alloy	[NASA-CASE-LEW-12542-1]
Process for fabricating SiC semiconductor devices	[NASA-CASE-LEW-12094-1]	c76 N76-25049	A regulated high efficiency, lightweight capacitor-diode multiplier DC to DC converter	[NASA-CASE-LEW-12791-1]
Bearing material	[NASA-CASE-LEW-11930-2]	c24 N76-26282	A cantilever mounted resilient pad gas bearing	[NASA-CASE-LEW-12569-1]
Method of producing I-123	[NASA-CASE-LEW-11390-2]	c25 N76-27383	Gas path seal	[NASA-CASE-LEW-12131-1]
Extraction and separation of a preferentially photo-dissociated molecular isotope into positive and negative ions by means of an electric field	[NASA-CASE-LEW-12465-1]	c72 N76-27967	Application of semiconductor diffusants to solar cells by screen printing	[NASA-CASE-LEW-12775-1]
Liquid metal slip ring	[NASA-CASE-LEW-12277-1]	c33 N76-28472	Method for fabricating solar cells having integral collector grids	[NASA-CASE-LEW-12819-1]
Direct heating surface combustor	[NASA-CASE-LEW-11877-1]	c44 N76-28646	Process for preparing liquid metal electrical contact device	[NASA-CASE-LEW-11978-1]
Production of I-123	[NASA-CASE-LEW-11390-3]	c25 N76-29379	Blade retainer assembly	[NASA-CASE-LEW-12608-1]
Thrust bearing	[NASA-CASE-LEW-11949-1]	c37 N76-29588	Hybrid composite laminate structures	[NASA-CASE-LEW-12118-1]
Inorganic-organic battery separator for alkaline batteries	[NASA-CASE-LEW-12649-1]	c44 N76-31674	Shaft seal assembly for high speed and high pressure applications	[NASA-CASE-LEW-11873-1]
Solar cell surface treatment	[NASA-CASE-LEW-11330-2]	c44 N76-33624	Bimetallic junctions	[NASA-CASE-LEW-11573-1]
Ion beam thruster shield	[NASA-CASE-LEW-12082-1]	c20 N77-10148	Sustained arc ignition system	[NASA-CASE-LEW-12444-1]
Automotive gas turbine fuel control	[NASA-CASE-LEW-12785-1]	c37 N77-13426	Hydrostatic bearing support	[NASA-CASE-LEW-11158-1]
Dual output variable pitch turbofan actuation system	[NASA-CASE-LEW-12419-1]	c07 N77-14025	Corneal seal device	[NASA-CASE-LEW-12258-1]
Silicon nitride coated, plastic covered solar cell	[NASA-CASE-LEW-11496-1]	c44 N77-14580	Intra-ocular pressure normalization apparatus	[NASA-CASE-LEW-12955-1]
Electrically rechargeable REDOX flow cell	[NASA-CASE-LEW-12220-1]	c44 N77-14581	Intra-ocular pressure normalization technique and equipment	[NASA-CASE-LEW-12723-1]
Magnetic heat pumping	[NASA-CASE-LEW-12508-1]	c34 N77-15343	Solar cell shingle	[NASA-CASE-LEW-12587-1]
Encapsulated solar cell modules	[NASA-CASE-LEW-12185-1]	c44 N77-15490	Platform for a swing root turbomachinery blade	[NASA-CASE-LEW-12312-1]
Reverse pitch fan with divided splitter	[NASA-CASE-LEW-12760-1]	c07 N77-17059	Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby	[NASA-CASE-LEW-12053-2]
Electronic analog divider	[NASA-CASE-LEW-11881-1]	c33 N77-17354	Bearing material	[NASA-CASE-LEW-11930-3]
Method of electrically pre-stressing insulation to provide directional increase in dc potential breakdown	[NASA-CASE-LEW-12273-1]	c33 N77-17357	Directionally solidified eutectic gamma plus beta nickel-base superalloys	[NASA-CASE-LEW-12906-1]
Traveling wave tube circuit	[NASA-CASE-LEW-12013-1]	c33 N77-17360	Nickel base alloy	[NASA-CASE-LEW-12270-1]
Solar cell collector and method for producing same	[NASA-CASE-LEW-12552-1]	c44 N77-17564	Closed loop spray cooling apparatus	[NASA-CASE-LEW-11981-2]
Improved backwall cell	[NASA-CASE-LEW-12236-1]	c44 N77-17565	Magnetic heat pumping	[NASA-CASE-LEW-12508-2]
Apparatus and method for reducing thermal stress in a turbine rotor				

Thermocouples of tantalum and rhenium alloys for more stable vacuum-high temperature performance
[NASA-CASE-LW-12050-1] c35 N77-32454

Indicated weak effective pressure instrument (IMFP)
[NASA-CASE-LW-12661-1] c35 N77-32461

Spatial filter for Q-switched lasers
[NASA-CASE-LW-12164-1] c36 N77-32478

Deformable bearing seat
[NASA-CASE-LW-12527-1] c37 N77-32500

Bearing seat usable in a gas turbine engine
[NASA-CASE-LW-12477-1] c37 N77-32501

Cesium thermionic converters having lanthanum hexaboride electrodes
[NASA-CASE-LW-12038-2] c44 N77-32595

**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
MANNED SPACECRAFT CENTER, CAPT CANAVERAL, FLA.**

Electrode for biological recording
[NASA-CASE-XMS-02872] c05 N69-21925

**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
MANNED SPACECRAFT CENTER, LANGLEY STATION, VA.**

Plural recorder system
[NASA-CASE-XMS-06949] c09 N69-21467

**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
MARSHALL SPACE FLIGHT CENTER, HUNTSVILLE, ALA.**

Electrical feed-through connection for printed circuit boards and printed cable
[NASA-CASE-XMF-01483] c14 N69-27431

Method for detecting hydrogen gas
[NASA-CASE-XMF-03873] c06 N69-39733

Electrical connector Patent Application
[NASA-CASE-MFS-14741] c09 N70-20737

Angular measurement system Patent
[NASA-CASE-XMF-00447] c14 N70-33179

Insulating structure Patent
[NASA-CASE-XMF-00341] c15 N70-33323

Space vehicle electrical system Patent
[NASA-CASE-XMF-00517] c03 N70-34157

Pivotal shock absorbing pad assembly
[NASA-CASE-XMF-03856] c31 N70-34159

Gimbaled, partially submerged rocket nozzle Patent
[NASA-CASE-XMF-01544] c28 N70-34162

Recoverable rocket vehicle Patent
[NASA-CASE-XMF-00389] c31 N70-34176

Electrical discharge apparatus for forming Patent
[NASA-CASE-XMF-00375] c15 N70-34249

Optical inspection apparatus Patent
[NASA-CASE-XMF-00462] c14 N70-34298

Relay binary circuit Patent
[NASA-CASE-XMF-00421] c09 N70-34502

Attitude and propellant flow control system and method Patent
[NASA-CASE-XMF-00185] c21 N70-34539

Electrical connector for flat cables Patent
[NASA-CASE-XMF-00324] c09 N70-34596

Externally pressurized fluid bearing Patent
[NASA-CASE-XMF-00515] c15 N70-34664

Force measuring instrument Patent
[NASA-CASE-XMF-00456] c14 N70-34705

Seismic displacement transducer Patent
[NASA-CASE-XMF-00479] c14 N70-34794

Electric arc welding Patent
[NASA-CASE-XMF-00392] c15 N70-34814

Assembly for recovering a capsule Patent
[NASA-CASE-XMF-00641] c31 N70-36410

Printed cable connector Patent
[NASA-CASE-XMF-00369] c09 N70-36498

Landing pad assembly for aerospace vehicles Patent
[NASA-CASE-XMF-02853] c31 N70-36654

Electric arc driven wind tunnel Patent
[NASA-CASE-XMF-00411] c11 N70-36913

Gravity device Patent
[NASA-CASE-XMF-00424] c11 N70-38196

Injector for bipropellant rocket engines Patent
[NASA-CASE-XMF-00148] c28 N70-38710

Electronic motor control system Patent
[NASA-CASE-XMF-01129] c09 N70-38712

Shock suppressing device and method Patent
[NASA-CASE-XMF-00658] c12 N70-38997

Air bearing Patent
[NASA-CASE-XMF-00339] c15 N70-39896

Instrument support with precise lateral adjustment Patent
[NASA-CASE-XMF-00480] c14 N70-39898

Segmented back-up bar Patent
[NASA-CASE-XMF-00640] c15 N70-39924

Collapsible loop antenna for space vehicle Patent
[NASA-CASE-XMF-00437] c07 N70-40202

Flexible back-up bar Patent
[NASA-CASE-XMF-00722] c15 N70-40204

Electro-optical alignment control system Patent
[NASA-CASE-XMF-00908] c14 N70-40238

Missile launch release system Patent
[NASA-CASE-XMF-03198] c30 N70-40353

Double-acting shock absorber Patent
[NASA-CASE-XMF-01045] c15 N70-40354

Portable alignment tool Patent
[NASA-CASE-XMF-01452] c15 N70-41371

Device for suppressing sound and heat produced by high-velocity exhaust jets Patent
[NASA-CASE-XMF-01813] c28 N70-41582

Unfired-ceramic flame-resistant insulation and method of making the same Patent
[NASA-CASE-XMF-01030] c18 N70-41583

Pulse counting circuit which simultaneously indicates the occurrence of the nth pulse Patent
[NASA-CASE-XMF-00906] c09 N70-41655

Support apparatus for dynamic testing Patent
[NASA-CASE-XMF-01772] c11 N70-41677

Locking device with rolling detents Patent
[NASA-CASE-XMF-01371] c15 N70-41829

Tank construction for space vehicles Patent
[NASA-CASE-XMF-01899] c31 N70-41948

Positive displacement flowmeter Patent
[NASA-CASE-XMF-02822] c14 N70-41994

Hydraulic support for dynamic testing Patent
[NASA-CASE-XMF-03248] c11 N71-10604

Fiber optic vibration transducer and analyzer Patent
[NASA-CASE-XMF-02433] c14 N71-10616

Method and means for damping nutation in a satellite Patent
[NASA-CASE-XMF-00442] c31 N71-10747

Heat pipe thermionic diode power system Patent
[NASA-CASE-XMF-05843] c03 N71-11055

Synthesis of siloxane-containing epoxy polymers Patent
[NASA-CASE-MFS-13994-1] c06 N71-11240

Bi-carrier demodulator with modulation Patent
[NASA-CASE-XMF-01160] c07 N71-11298

Harness assembly Patent
[NASA-CASE-MFS-14671] c05 N71-12341

Magnetic matrix memory system Patent
[NASA-CASE-XMF-05835] c08 N71-12504

Pulse amplitude and width detector Patent
[NASA-CASE-XMF-06519] c09 N71-12519

Microwave power receiving antenna Patent
[NASA-CASE-MFS-20333] c09 N71-13486

Hybrid holographic system using reflected and transmitted object beams simultaneously Patent
[NASA-CASE-MFS-20074] c16 N71-15565

Reactance control system Patent
[NASA-CASE-XMF-01598] c21 N71-15583

Apparatus for welding torch angle and seam tracking control Patent
[NASA-CASE-XMF-03287] c15 N71-15607

Multway vortex valve system Patent
[NASA-CASE-XMF-04709] c15 N71-15609

Injector assembly for liquid fueled rocket engines Patent
[NASA-CASE-XMF-00968] c28 N71-15660

Space capsule ejection assembly Patent
[NASA-CASE-XMF-03169] c31 N71-15675

Air cushion lift pad Patent
[NASA-CASE-MFS-14685] c31 N71-15689

Method of making a molded connector Patent
[NASA-CASE-XMF-03498] c15 N71-15986

Regenerative braking system Patent
[NASA-CASE-XMF-01096] c10 N71-16030

Condition and condition duration indicator Patent
[NASA-CASE-XMF-01097] c10 N71-16058

Method and apparatus for securing to a spacecraft Patent
[NASA-CASE-MFS-11133] c31 N71-16222

Method and apparatus of simulating zero gravity conditions Patent
[NASA-CASE-MFS-12750] c27 N71-16223

Passive optical wind and turbulence detection system Patent
[NASA-CASE-XMF-14032] c20 N71-16340

Serpentuator Patent
[NASA-CASE-XMF-05344] c31 N71-16345

Gravimeter Patent
[NASA-CASE-XMF-05844] c14 N71-17587

High pressure gas filter system Patent
[NASA-CASE-MFS-12806] c14 N71-17588

Burst diaphragm flow initiator Patent		
[NASA-CASE-MFS-12915]	c11	N71-17600
Vacuum deposition apparatus Patent		
[NASA-CASE-XMF-01667]	c15	N71-17647
Quick disconnect latch and handle combination Patent		
[NASA-CASE-MFS-11132]	c15	N71-17649
Method and apparatus for precision sizing and joining of large diameter tubes Patent		
[NASA-CASE-XMF-05114]	c15	N71-17650
Low temperature flexure fatigue cryostat Patent		
[NASA-CASE-MFS-02964]	c14	N71-17659
Precision stepping drive Patent		
[NASA-CASE-MFS-14772]	c15	N71-17692
Multi-mission module Patent		
[NASA-CASE-XMF-01543]	c31	N71-17730
Ratchet mechanism Patent		
[NASA-CASE-MFS-12805]	c15	N71-17805
Method of making impurity-type semiconductor electrical contacts Patent		
[NASA-CASE-XMF-01016]	c26	N71-17818
Apparatus for the determination of the existence or non-existence of a bonding between two members Patent		
[NASA-CASE-MFS-13686]	c15	N71-18132
Static inverters which sum a plurality of waves Patent		
[NASA-CASE-XMF-00663]	c08	N71-18752
Space environmental work simulator Patent		
[NASA-CASE-XMF-07488]	c11	N71-18773
Space manufacturing machine Patent		
[NASA-CASE-MFS-20410]	c15	N71-19214
Extensometer Patent		
[NASA-CASE-XMF-04680]	c15	N71-19489
Mechanical simulator of low gravity conditions Patent		
[NASA-CASE-MFS-10555]	c11	N71-19494
Weld control system using thermocouple wire Patent		
[NASA-CASE-MFS-06074]	c15	N71-20393
Evaporant source for vapor deposition Patent		
[NASA-CASE-XMF-06065]	c15	N71-20395
Satellite despin device Patent		
[NASA-CASE-XMF-08523]	c31	N71-20396
Method of coating circuit paths on printed circuit boards with solder Patent		
[NASA-CASE-XMF-01599]	c09	N71-20705
Elastomeric silazane polymers and process for preparing the same Patent		
[NASA-CASE-XMF-04133]	c06	N71-20717
Method of producing alternating ether siloxane copolymers Patent		
[NASA-CASE-XMF-02584]	c06	N71-20905
Honeycomb panel and method of making same Patent		
[NASA-CASE-XMF-01402]	c18	N71-21651
Portable milling tool Patent		
[NASA-CASE-XMF-03511]	c15	N71-22799
Energy absorbing device Patent		
[NASA-CASE-XMF-10040]	c15	N71-22877
Continuous detonation reaction engine Patent		
[NASA-CASE-XMF-06926]	c28	N71-22983
Adaptive tracking notch filter system Patent		
[NASA-CASE-XMF-01892]	c10	N71-22986
Meteorological balloon Patent		
[NASA-CASE-XMF-04163]	c02	N71-23007
Continuous turning slip ring assembly Patent		
[NASA-CASE-XMF-01049]	c15	N71-23049
Automatic welding speed controller Patent		
[NASA-CASE-XMF-01730]	c15	N71-23050
Positive dc to positive dc converter Patent		
[NASA-CASE-XMF-14301]	c09	N71-23188
Zero gravity apparatus Patent		
[NASA-CASE-XMF-06515]	c14	N71-23227
Positive dc to negative dc converter Patent		
[NASA-CASE-XMF-08217]	c03	N71-23239
Evacuation port seal Patent		
[NASA-CASE-XMF-03290]	c15	N71-23256
Azimuth laying system Patent		
[NASA-CASE-XMF-01669]	c21	N71-23289
Electron beam instrument for measuring electric fields Patent		
[NASA-CASE-XMF-10289]	c14	N71-23699
Anemometer with braking mechanism Patent		
[NASA-CASE-XMF-05224]	c14	N71-23726
Apparatus for testing a pressure responsive instrument Patent		
[NASA-CASE-XMF-04134]	c14	N71-23755
Electric welding torch Patent		
[NASA-CASE-XMF-02330]	c15	N71-23798
Swivel support for gas bearings Patent		
[NASA-CASE-XMF-07808]	c15	N71-23812
Welding skate with computerized control Patent		
[NASA-CASE-XMF-07069]	c15	N71-23815
Docking structure for spacecraft Patent		
[NASA-CASE-XMF-05941]	c31	N71-23912
High pressure helium purifier Patent		
[NASA-CASE-XMF-06888]	c15	N71-24044
Horizontal cryostat for fatigue testing Patent		
[NASA-CASE-XMF-10968]	c14	N71-24234
Method for leakage testing of tanks Patent		
[NASA-CASE-XMF-02392]	c32	N71-24285
Internal flare angle gauge Patent		
[NASA-CASE-XMF-04415]	c14	N71-24693
Pulse rise time and amplitude detector Patent		
[NASA-CASE-XMF-08804]	c09	N71-24717
System for maintaining a motor at a predetermined speed utilizing digital feedback means Patent		
[NASA-CASE-XMF-06892]	c09	N71-24805
Power system with heat pipe liquid coolant lines Patent		
[NASA-CASE-MFS-14114-2]	c09	N71-24807
Magnetomotive metal working device Patent		
[NASA-CASE-XMF-03793]	c15	N71-24833
Apparatus for determining the deflection of an electron beam impinging on a target Patent		
[NASA-CASE-XMF-06617]	c09	N71-24843
Transistor servo system including a unique differential amplifier circuit Patent		
[NASA-CASE-XMF-05195]	c10	N71-24861
RC rate generator for slow speed measurement Patent		
[NASA-CASE-XMF-02966]	c10	N71-24863
Method and apparatus for precision sizing and joining of large diameter tubes Patent		
[NASA-CASE-XMF-05114-3]	c15	N71-24865
Duct coupling for single-handed operation Patent		
[NASA-CASE-MFS-20395]	c15	N71-24903
Brushless direct current tachometer Patent		
[NASA-CASE-MFS-20385]	c09	N71-24904
Self-lubricating gears and other mechanical parts Patent		
[NASA-CASE-MFS-14971]	c15	N71-24984
Pulse width inverter Patent		
[NASA-CASE-MFS-10068]	c10	N71-25139
Isothermal cover with thermal reservoirs Patent		
[NASA-CASE-MFS-20355]	c33	N71-25353
Storage container for electronic devices Patent		
[NASA-CASE-MFS-20075]	c09	N71-26133
Method and apparatus for precision sizing and joining of large diameter tubes Patent		
[NASA-CASE-XMF-05114-2]	c15	N71-26148
Filter system for control of outgas contamination in vacuum Patent		
[NASA-CASE-MFS-14711]	c15	N71-26185
Image magnification adapter for cameras Patent		
[NASA-CASE-XMF-03844-1]	c14	N71-26474
Thickness measuring and injection device Patent		
[NASA-CASE-MFS-20261]	c14	N71-27005
Personal propulsion unit Patent		
[NASA-CASE-MFS-20130]	c28	N71-27585
Power system with heat pipe liquid coolant lines Patent		
[NASA-CASE-MFS-14114]	c33	N71-27862
Method of making shielded flat cable Patent		
[NASA-CASE-MFS-13687]	c09	N71-28691
A dc motor speed control system Patent		
[NASA-CASE-XMF-14610]	c09	N71-28886
Cryogenic thermal insulation Patent		
[NASA-CASE-XMF-05046]	c33	N71-28892
Method of coating through-holes Patent		
[NASA-CASE-XMF-05999]	c15	N71-29032
Response analyzers for sensors Patent		
[NASA-CASE-MFS-11204]	c14	N71-29134
Current regulating voltage divider Patent		
[NASA-CASE-MFS-20935]	c09	N71-34212
Nuclear mass flowmeter Patent		
[NASA-CASE-MFS-20485]	c14	N72-11365
Fine adjustment mount Patent		
[NASA-CASE-MFS-20249]	c15	N72-11386
Method of making foamed materials in zero gravity Patent		
[NASA-CASE-XMF-09902]	c15	N72-11387
Air bearing assembly for curved surfaces Patent		
[NASA-CASE-MFS-20423]	c15	N72-11388
Stud-bonding gun Patent		
[NASA-CASE-MFS-20299]	c15	N72-11392
Apparatus for obtaining isotropic irradiation of a specimen		

[NASA-CASE-MFS-20095]	c24 N72-11595	Underwater space suit pressure control regulator	
Wind tunnel test section		[NASA-CASE-MFS-20332-2]	c05 N73-25125
[NASA-CASE-MFS-20509]	c11 N72-17183	Maxometers (peak wind speed anemometers)	
Multiple image storing system for high speed		[NASA-CASE-MFS-20916]	c14 N73-25460
projectile holoigraphy		Monitoring deposition of films	
[NASA-CASE-MFS-20596]	c14 N72-17324	[NASA-CASE-MFS-20675]	c26 N73-26751
Method of manufacturing semiconductor devices		Docking structure for spacecraft	
using refractory dielectrics		[NASA-CASE-MFS-20863]	c31 N73-26876
[NASA-CASE-MFS-08476-1]	c26 N72-17820	Wide temperature range electronic device with	
Underwater space suit pressure control regulator		lead attachment	
[NASA-CASE-MFS-20332]	c05 N72-20097	[NASA-CASE-MFS-10224-2]	c09 N73-27150
Apparatus for making diamcrds		Restraint system for ergometer	
[NASA-CASE-MFS-20698]	c15 N72-20446	[NASA-CASE-MFS-21046-1]	c14 N73-27377
An airlock		Apparatus and method for skin packaging articles	
[NASA-CASE-MFS-20922]	c31 N72-20840	[NASA-CASE-MFS-20855]	c15 N73-27405
Photoetching of metal-oxide layers		Ergometer	
[NASA-CASE-MFS-10108]	c06 N72-21094	[NASA-CASE-MFS-21109-1]	c05 N73-27941
Liquid aerosol dispenser		Tilting table for ergometer and for other	
[NASA-CASE-MFS-20829]	c12 N72-21310	biomedical devices	
Optical probing of supersonic flows with		[NASA-CASE-MFS-21010-1]	c05 N73-30078
statistical correlation		Measurement system	
[NASA-CASE-MFS-20642]	c14 N72-21407	[NASA-CASE-MFS-20658-1]	c14 N73-30386
Mechanically actuated triggered band		Collimator of multiple plates with axially	
[NASA-CASE-MFS-20413]	c15 N72-21463	aligned identical random arrays of apertures	
Hermetically sealed elbow actuator		[NASA-CASE-MFS-20546-2]	c14 N73-30389
[NASA-CASE-MFS-14710]	c09 N72-22195	Holographic thin film analyzer	
Shielded flat cable		[NASA-CASE-MFS-20823-1]	c16 N73-30476
[NASA-CASE-MFS-13687-2]	c09 N72-22198	Semiconductor surface protection material	
Shock wave convergence apparatus		[NASA-CASE-MFS-10339-1]	c18 N73-30532
[NASA-CASE-MFS-20890]	c14 N72-22439	Polymerizable disiloxanes having in-chain	
Bonding of reinforced Teflon to metals		perfluoralkyl groups	
[NASA-CASE-MFS-20482]	c15 N72-22492	[NASA-CASE-MFS-20979-2]	c06 N73-32030
Inorganic thermal control coatings		Redundant speed control for brushless Hall	
[NASA-CASE-MFS-20011]	c18 N72-22566	effect motor	
High temperature furnace for melting		[NASA-CASE-MFS-20207-1]	c09 N73-32107
materials		Induction motor control system with voltage	
[NASA-CASE-MFS-2C710]	c11 N72-23215	controlled oscillator circuit	
Siloxane containing epoxide compounds		[NASA-CASE-MFS-21465-1]	c10 N73-32145
[NASA-CASE-MFS-13994-2]	c06 N72-25148	Synthesis of superconducting compounds by	
Silphenylenesiloxane polymers having		explosive compaction of powders	
in-chain		[NASA-CASE-MFS-20861-1]	c18 N73-32437
perfluoralkyl groups		Ultrasonic scanner for radial and flat panels	
[NASA-CASE-MFS-20979]	c06 N72-25151	[NASA-CASE-MFS-20335-1]	c35 N74-10415
Emergency lunar communications system		Digital computing cardiometer	
[NASA-CASE-MFS-21042]	c07 N72-25171	[NASA-CASE-MFS-20284-1]	c52 N74-12778
Lead attachment to high temperature devices		Integrated circuit package with lead structure	
[NASA-CASE-MFS-10224]	c09 N72-25261	and method of preparing the same	
Device for measuring bearing preload		[NASA-CASE-MFS-21374-1]	c33 N74-12951
[NASA-CASE-MFS-20434]	c11 N72-25288	Vee-notching device	
Altitude simulation chamber for rocket engine		[NASA-CASE-MFS-20730-1]	c39 N74-13131
testing		Ultrasonic scanning system for in-place	
[NASA-CASE-MFS-20620]	c11 N72-27262	inspection of brazed tube joints	
Fixture for supporting articles during vibration		[NASA-CASE-MFS-20767-1]	c38 N74-15130
tests		Method and apparatus for checking the stability	
[NASA-CASE-MFS-20523]	c14 N72-27412	of a setup for making reflection type holoigrams	
Electrical connector		[NASA-CASE-MFS-21455-1]	c35 N74-15146
[NASA-CASE-MFS-20757]	c09 N72-28225	Method and apparatus for nondestructive testing	
Remote control manipulator for zero gravity		[NASA-CASE-MFS-21233-1]	c38 N74-15395
environment		Real time moving scene holographic camera system	
[NASA-CASE-MFS-14405]	c15 N72-28495	[NASA-CASE-MFS-21087-1]	c35 N74-17153
Thermal compensating structural member		Nonflammable coating compositions	
[NASA-CASE-MFS-20433]	c15 N72-28496	[NASA-CASE-MFS-20486-2]	c27 N74-17283
Semiconductor transducer device		Metering gun for dispensing precisely measured	
[NASA-CASE-MFS-10087-2]	c14 N72-31446	charges of fluid	
Coaxial high density, hypervelocity plasma		[NASA-CASE-MFS-21163-1]	c54 N74-17853
generator and accelerator with ionizable metal		Omnidirectional wheel	
disc		[NASA-CASE-MFS-21309-1]	c37 N74-18125
[NASA-CASE-MFS-20589]	c25 N72-32688	Reinforced polyquinoxaline gasket and method of	
Process for the preparation of brushite crystals		preparing the same	
[NASA-CASE-MFS-10338]	c04 N72-33072	[NASA-CASE-MFS-21364-1]	c37 N74-18126
Adjustable force probe		Manual actuator	
[NASA-CASE-MFS-20760]	c14 N72-33377	[NASA-CASE-MFS-21481-1]	c37 N74-18127
Polyimide resin-fiberglass cloth laminates for		Cryogenic gyroscope housing	
printed circuit boards		[NASA-CASE-MFS-21136-1]	c35 N74-18323
[NASA-CASE-MFS-20408]	c18 N73-12604	Automatic frequency control for FM transmitter	
Differential pressure control		[NASA-CASE-MFS-21540-1]	c32 N74-19790
[NASA-CASE-MFS-14216]	c14 N73-13418	Microwave power transmission system wherein	
Redundant hydraulic control system for actuators		level of transmitted power is controlled by	
[NASA-CASE-MFS-20944]	c15 N73-13466	reflections from receiver	
Device and method for determining X ray		[NASA-CASE-MFS-21470-1]	c44 N74-19870
reflection efficiency of optical surfaces		Reduced gravity fecal collector seat and urinal	
[NASA-CASE-MFS-20243]	c23 N73-13662	[NASA-CASE-MFS-22102-1]	c54 N74-20725
Process for making diamonds		Metabolic analyzer	
[NASA-CASE-MFS-20698-2]	c15 N73-19457	[NASA-CASE-MFS-21415-1]	c52 N74-20728
Test stand system for vacuum chambers		Automatic quadrature control and measuring system	
[NASA-CASE-MFS-21362]	c11 N73-20267	[NASA-CASE-MFS-21660-1]	c35 N74-21017
Material fatigue testing system		Thiophenyl ether disiloxanes and trisiloxanes	
[NASA-CASE-MFS-20673]	c14 N73-20476	useful as lubricant fluids	
Ratemeter		[NASA-CASE-MFS-22411-1]	c37 N74-21058
[NASA-CASE-MFS-20418]	c14 N73-24473		

Airlock			Apparatus for calibrating an image dissector tube	
[NASA-CASE-MFS-20922-1]	c18	N74-22136	[NASA-CASE-MFS-22208-1]	c33 N75-26244
Low distortion automatic phase control circuit			Method of determining bond quality of power	
[NASA-CASE-MFS-21671-1]	c33	N74-22885	transistors attached to substrates	
Two speed drive system			[NASA-CASE-MFS-21931-1]	c37 N75-26372
[NASA-CASE-MFS-20645-1]	c37	N74-23070	Anti-gravity device	
Insert facing tool			[NASA-CASE-MFS-22758-1]	c70 N75-26789
[NASA-CASE-MFS-21485-1]	c37	N74-25968	Brazing alloy binder	
LC-oscillator with automatic stabilized			[NASA-CASE-MFS-05868]	c26 N75-27125
amplitude via bias current control			Brazing alloy composition	
[NASA-CASE-MFS-21698-1]	c33	N74-26732	[NASA-CASE-MFS-06053]	c26 N75-27126
Device for monitoring a change in mass in			Refractory porcelain enamel passive control	
varying gravimetric environments			coating for high temperature alloys	
[NASA-CASE-MFS-21556-1]	c35	N74-26945	[NASA-CASE-MFS-22324-1]	c27 N75-27160
Holography utilizing surface plasmon resonances			Real time, large volume, moving scene	
[NASA-CASE-MFS-22040-1]	c35	N74-26946	holographic camera system	
Electrophoretic sample insertion			[NASA-CASE-MFS-22537-1]	c35 N75-27328
[NASA-CASE-MFS-21395-1]	c25	N74-26948	Method and apparatus for vibration analysis	
Sprag solenoid brake			utilizing the Mossbauer effect	
[NASA-CASE-MFS-21846-1]	c37	N74-26976	[NASA-CASE-MFS-05882]	c35 N75-27329
Device for configuring multiple leads			Method of preparing graphite reinforced aluminum	
[NASA-CASE-MFS-22133-1]	c33	N74-26977	composite	
Thrust-actuating mounting			[NASA-CASE-MFS-21077-1]	c24 N75-28135
[NASA-CASE-MFS-21680-1]	c18	N74-27397	Carbon monoxide monitor	
Battery testing device			[NASA-CASE-MFS-22060-1]	c35 N75-29380
[NASA-CASE-MFS-20761-1]	c44	N74-27519	Perfluoro alkylene dioxy-bis-(4-phthalic	
Apparatus for establishing flow of a fluid mass			anhydrides and	
having a known velocity			oxy-bis-(perfluoroalkyleneoxyphthalic	
[NASA-CASE-MFS-21424-1]	c34	N74-27730	anhydrides	
Apparatus for conducting flow electrophoresis in			[NASA-CASE-MFS-22356-1]	c23 N75-30256
the substantial absence of gravity			Integrable power gyrator	
[NASA-CASE-MFS-21394-1]	c34	N74-27744	[NASA-CASE-MFS-22342-1]	c33 N75-30428
Steady state thermal radiometers			Isolated output system for a class D	
[NASA-CASE-MFS-21108-1]	c34	N74-27861	switching-mode amplifier	
Conductive elastomeric extensometer			[NASA-CASE-MFS-21616-1]	c33 N75-30429
[NASA-CASE-MFS-21049-1]	c52	N74-27864	Solar energy power system	
Device for measuring tensile forces			[NASA-CASE-MFS-21628-1]	c44 N75-32581
[NASA-CASE-MFS-21728-1]	c35	N74-27865	System for enhancing tool-exchange capabilities	
Three mirror glancing incidence system for X-ray			of a portable wrench	
telescope			[NASA-CASE-MFS-22283-1]	c37 N75-33395
[NASA-CASE-MFS-21372-1]	c74	N74-27866	An improved rotatable mass for a flywheel	
Flame detector operable in presence of proton			[NASA-CASE-MFS-23051-1]	c37 N76-13500
radiation			Projection system for display of parallax and	
[NASA-CASE-MFS-21577-1]	c19	N74-29410	perspective	
Integrated I-channel MOS gyrator			[NASA-CASE-MFS-23194-1]	c74 N76-13909
[NASA-CASE-MFS-22343-1]	c33	N74-34638	Externally supported internally stabilized	
System for depositing thin films			flexible duct joint	
[NASA-CASE-MFS-20775-1]	c31	N75-12161	[NASA-CASE-MFS-19194-1]	c37 N76-14460
Ultrasonic bone densitometer			Quick disconnect filter coupling	
[NASA-CASE-MFS-20994-1]	c35	N75-12271	[NASA-CASE-MFS-22323-1]	c37 N76-14463
Strain gauge ambiguity sensor for segmented			Panel for selectively absorbing solar thermal	
mirror active optical system			energy and the method of producing said panel	
[NASA-CASE-MFS-20506-1]	c35	N75-12273	[NASA-CASE-MFS-22562-1]	c44 N76-14595
Orthotic air joint			Rapid activation and checkout device for batteries	
[NASA-CASE-MFS-21611-1]	c54	N75-12616	[NASA-CASE-MFS-22749-1]	c44 N76-14601
Automatically operable self-leveling			Two stage light gas-plasma projectile accelerator	
load table			[NASA-CASE-MFS-22287-1]	c75 N76-14931
[NASA-CASE-MFS-22039-1]	c09	N75-12968	Polyimides of ether-linked aryl tetracarboxylic	
Phase-locked servo system			dianhydrides	
[NASA-CASE-MFS-22673-1]	c33	N75-13139	[NASA-CASE-MFS-22355-1]	c23 N76-15268
Self-energized plasma compressor			Remotely operable articulated manipulator	
[NASA-CASE-MFS-22145-1]	c75	N75-13625	[NASA-CASE-MFS-22707-1]	c37 N76-15457
Clear air turbulence detector			Remote manipulator system	
[NASA-CASE-MFS-21244-1]	c36	N75-15028	[NASA-CASE-MFS-22022-1]	c37 N76-15460
Variable frequency inverter for ac induction			Thermoelectric power system	
motors with torque, speed and braking control			[NASA-CASE-MFS-22002-1]	c44 N76-16612
[NASA-CASE-MFS-22088-1]	c33	N75-15874	Self-energized plasma compressor	
Leak detector			[NASA-CASE-MFS-22145-2]	c75 N76-17951
[NASA-CASE-MFS-21761-1]	c35	N75-15931	Device for measuring the ferrite content in an	
Ergometer calibrator			austenitic stainless-steel weld	
[NASA-CASE-MFS-21045-1]	c35	N75-15932	[NASA-CASE-MFS-22907-1]	c26 N76-18257
Space vehicle			Heat transfer device	
[NASA-CASE-MFS-22734-1]	c18	N75-19329	[NASA-CASE-MFS-22938-1]	c34 N76-18374
Meter for use in detecting tension in straps			Holographic motion picture camera with Doppler	
having predetermined elastic characteristics			shift compensation	
[NASA-CASE-MFS-22189-1]	c35	N75-19615	[NASA-CASE-MFS-22517-1]	c35 N76-18402
Multiplate focusing collimator			Method of peening and portable peening gun	
[NASA-CASE-MFS-20932-1]	c35	N75-19616	[NASA-CASE-MFS-23047-1]	c37 N76-18454
Internally supported flexible duct joint			Semiconductor projectile impact detector	
[NASA-CASE-MFS-19193-1]	c37	N75-19686	[NASA-CASE-MFS-23008-1]	c35 N76-19405
Pseudo-noise test set for communication system			Mixing insert for foam dispensing apparatus	
evaluation			[NASA-CASE-MFS-20607-1]	c37 N76-19436
[NASA-CASE-MFS-22671-1]	c35	N75-21582	Traffic survey system	
Device for use in loading tension members			[NASA-CASE-MFS-22631-1]	c66 N76-19888
[NASA-CASE-MFS-21488-1]	c14	N75-24794	Electronic optical transfer function analyzer	
Holographic system for nondestructive testing			[NASA-CASE-MFS-21672-1]	c74 N76-19935
[NASA-CASE-MFS-21704-1]	c35	N75-25124	System for imposing directional stability on a	
Hole cutter			rocket-propelled vehicle	
[NASA-CASE-MFS-22649-1]	c37	N75-25186	[NASA-CASE-MFS-21311-1]	c20 N76-21275

Filtering device			Actuator device for artificial leg	
[NASA-CASE-MFS-22729-1]	c32	N76-21366	[NASA-CASE-MFS-23225-1]	c52 N77-14735
Translatory shock absorber for attitude sensors			System for the measurement of ultra-low stray	
[NASA-CASE-MFS-22905-1]	c19	N76-22284	light levels	
Device for installing rocket engines			[NASA-CASE-MFS-23513-1]	c74 N77-14842
[NASA-CASE-MFS-19220-1]	c20	N76-22296	Sprayable low density ablator	
Deployable flexible tunnel			[NASA-CASE-MFS-23506-1]	c24 N77-15105
[NASA-CASE-MFS-22636-1]	c37	N76-22540	Frequency modulated oscillator	
Solar energy absorber			[NASA-CASE-MFS-23181-1]	c33 N77-17351
[NASA-CASE-MFS-22743-1]	c44	N76-22657	Method of and means for testing a tape	
Apparatus for reducing aerodynamic noise in a			record/playback system	
wind tunnel			[NASA-CASE-MFS-22671-2]	c35 N77-17426
[NASA-CASE-MFS-23099-1]	c09	N76-23273	Simulator for practicing the mating of an	
Charge injection method and apparatus of			observer-controlled object with a target	
producing large area electrets			[NASA-CASE-MFS-23052-2]	c14 N77-18179
[NASA-CASE-MFS-23186-1]	c33	N76-23483	Notch filter	
Solar energy power system			[NASA-CASE-MFS-23303-1]	c32 N77-18307
[NASA-CASE-MFS-21628-2]	c44	N76-23675	Guide for a typewriter	
Plasma cleaning device			[NASA-CASE-MFS-15218-1]	c37 N77-19457
[NASA-CASE-MFS-22906-1]	c75	N76-24001	Direct current transformer	
Hybrid holographic non-destructive test system			[NASA-CASE-MFS-23659-1]	c33 N77-20341
[NASA-CASE-MFS-23114-1]	c35	N76-24529	Mount for continuously orienting a collector	
Solar energy trap			dish in a system adapted to perform both	
[NASA-CASE-MFS-22744-1]	c44	N76-24696	diurnal and seasonal solar tracking	
Failure detection and control means for improved			[NASA-CASE-MFS-23267-1]	c35 N77-20401
drift performance of a gimballed platform system			Apparatus for automatically spraying a coating	
[NASA-CASE-MFS-23551-1]	c04	N76-26175	material	
Field effect transistor and method of			[NASA-CASE-MFS-23506-2]	c37 N77-20441
construction thereof			Emergency descent device	
[NASA-CASE-MFS-23312-1]	c33	N76-26394	[NASA-CASE-MFS-23074-1]	c54 N77-21844
Method of post-process intensification of images			Device for tensioning test specimens within an	
on photographic films and plates			hermetically sealed chamber	
[NASA-CASE-MFS-23461-1]	c35	N76-26449	[NASA-CASE-MFS-23281-1]	c35 N77-22450
Method and means for testing a			Combined docking and grasping device	
glancing-incidence mirror system			[NASA-CASE-MFS-23088-1]	c37 N77-23483
[NASA-CASE-MFS-22409-2]	c74	N76-26988	Computerized system for translating a torch head	
Lead-oxygen dc power supply system having a			[NASA-CASE-MFS-23620-1]	c37 N77-24497
closed loop oxygen and water system			Method of growing composites of the type	
[NASA-CASE-MFS-23059-1]	c44	N76-27664	exhibiting the Soret effect	
Power factor control system for ac induction			[NASA-CASE-MFS-22926-1]	c24 N77-27187
motors			Multilevel metallization method for fabricating	
[NASA-CASE-MFS-23280-1]	c33	N76-28471	a metal oxide semiconductor device	
Wrist joint assembly			[NASA-CASE-MFS-23541-1]	c33 N77-27308
[NASA-CASE-MFS-23311-1]	c37	N76-28554	Method for measuring biaxial stress in a body	
Germanium coated microbridge and method			subjected to stress inducing loads	
[NASA-CASE-MFS-23274-1]	c76	N76-30084	[NASA-CASE-MFS-23299-1]	c39 N77-28511
Dual mode solid state power switch			Three-mirror telescope	
[NASA-CASE-MFS-22880-1]	c33	N76-31410	[NASA-CASE-MFS-23675-1]	c74 N77-28937
Thermal energy storage system			Method for attaching a fused-quartz mirror to a	
[NASA-CASE-MFS-23167-1]	c44	N76-31667	conductive metal substrate	
An improved method and apparatus for use in			[NASA-CASE-MFS-23405-1]	c26 N77-29260
examining the lattice of a semiconductor wafer			Method of preparing zinc orthotitanate pigment	
by X-ray diffraction			[NASA-CASE-MFS-23345-1]	c27 N77-30237
[NASA-CASE-MFS-23315-1]	c76	N76-32029	Accumulator	
Aircraft-mounted crash-activated transmitter			[NASA-CASE-MFS-19287-1]	c34 N77-30399
device			Tachometer	
[NASA-CASE-MFS-16609-3]	c03	N76-32140	[NASA-CASE-MFS-23175-1]	c35 N77-30436
FM/CW radar system			Horizontally mounted solar collector	
[NASA-CASE-MFS-22234-1]	c32	N76-33364	[NASA-CASE-MFS-23349-1]	c44 N77-30613
Velocity measurement system			Apparatus for assembling space structure	
[NASA-CASE-MFS-23363-1]	c35	N76-33469	[NASA-CASE-MFS-23579-1]	c12 N77-31213
Multiple in-line docking capability for rotating			Dual mode solid state power switch	
space stations			[NASA-CASE-MFS-22880-2]	c33 N77-31407
[NASA-CASE-MFS-20855-1]	c15	N77-10112	Real time reflectometer	
Attitude control system			[NASA-CASE-MFS-23118-1]	c35 N77-31465
[NASA-CASE-MFS-22787-1]	c15	N77-10113	Aluminum or copper substrate panel for selective	
Heat exchanger			absorption of solar energy and the method of	
[NASA-CASE-MFS-22991-1]	c34	N77-10463	producing said panel	
Focused laser Doppler velocimeter			[NASA-CASE-MFS-23518-1]	c44 N77-31610
[NASA-CASE-MFS-23178-1]	c35	N77-10493	Stainless steel panel for selective absorption	
Laser extensometer			of solar energy and the method of producing	
[NASA-CASE-MFS-19259-1]	c36	N77-10516	said panel	
Photovoltaic cell array			[NASA-CASE-MFS-23518-2]	c44 N77-31611
[NASA-CASE-MFS-22458-1]	c44	N77-10635	Method of crystallization	
Wind measurement system			[NASA-CASE-MFS-23001-1]	c76 N77-32919
[NASA-CASE-MFS-23362-1]	c47	N77-10753	NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.	
Tetherline system for orbiting satellites			PASADENA OFFICE, CALIF.	
[NASA-CASE-MFS-23564-1]	c13	N77-11079	Phase control circuits using frequency	
Spherical bearing			multiplications for phased array antennas	
[NASA-CASE-MFS-23447-1]	c37	N77-11403	[NASA-CASE-ERC-10285]	c10 N73-16206
General purpose rocket furnace			Method of forming difunctional polyisobutylene	
[NASA-CASE-MFS-23460-1]	c09	N77-12070	[NASA-CASE-NFO-10893]	c27 N73-22710
Mechanical thermal motor			Radiation and particle detector and amplifier	
[NASA-CASE-MFS-23062-1]	c37	N77-12402	[NASA-CASE-NFO-12128-1]	c14 N73-32317
Method and apparatus for reconditioning			Expandable space frames	
nickel-cadmium batteries			[NASA-CASE-ERC-10365-1]	c31 N73-32749
[NASA-CASE-MFS-23270-1]	c44	N77-12511	Use of thin film light detector	
Solid-state current transformer			[NASA-CASE-NFO-11432-2]	c35 N74-15090
[NASA-CASE-MFS-22560-1]	c33	N77-14335		

Temperature compensated digital inertial sensor [NASA-CASE-NPO-13044-1]	c35 N74-15094	Motor run-up system [NASA-CASE-NPO-13374-1]	c33 N75-19524
Compact hydrogenator [NASA-CASE-NPO-11682-1]	c35 N74-15127	Frequency scanning particle size spectrometer [NASA-CASE-NPO-13606-1]	c35 N75-19627
Short range laser obstacle detector [NASA-CASE-NPO-11856-1]	c36 N74-15145	Particle size spectrometer and refractometer [NASA-CASE-NPO-13614-1]	c35 N75-19628
System for stabilizing cable phase delay utilizing a coaxial cable under pressure [NASA-CASE-NPO-13138-1]	c33 N74-17927	Deep trap, laser activated image converting system [NASA-CASE-NPO-13131-1]	c36 N75-19652
Banded transformer cores [NASA-CASE-NPO-11966-1]	c33 N74-17928	Multitarget sequential sputtering apparatus [NASA-CASE-NPO-13345-1]	c37 N75-19684
Inverter ratio failure detector [NASA-CASE-NPO-13160-1]	c35 N74-18090	Method and apparatus for providing a servodrive signal in a high speed stepping interferometer [NASA-CASE-NPO-13569-1]	c35 N75-21600
Heat transfer device [NASA-CASE-NPO-11120-1]	c34 N74-18552	Motion restraining device [NASA-CASE-NPO-13619-1]	c37 N75-22748
Storage battery comprising negative plates of a wedge shaped configuration [NASA-CASE-NPO-11806-1]	c44 N74-19693	Wide angle sun sensor [NASA-CASE-NPO-13327-1]	c35 N75-23910
Gated compressor, distortionless signal limiter [NASA-CASE-NPO-11820-1]	c32 N74-19788	Material suspension within an acoustically excited resonant chamber [NASA-CASE-NPO-13263-1]	c12 N75-24774
Apparatus for scanning the surface of a cylindrical body [NASA-CASE-NPO-11861-1]	c36 N74-20009	Heat operated cryogenic electrical generator [NASA-CASE-NPO-13303-1]	c20 N75-24837
Decision feedback loop for tracking a polyphase modulated carrier [NASA-CASE-NPO-13103-1]	c32 N74-20811	System for interference signal nulling by polarization adjustment [NASA-CASE-NPO-13140-1]	c32 N75-24982
Optically actuated two position mechanical mover [NASA-CASE-NPO-13105-1]	c37 N74-21060	Heat detection and compositions and devices therefor [NASA-CASE-NPO-10764-2]	c35 N75-25122
Flow control valve [NASA-CASE-NPO-11951-1]	c37 N74-21065	Servo-controlled intravital microscope system [NASA-CASE-NPO-13214-1]	c35 N75-25123
Thin film gauge [NASA-CASE-NPO-10617-1]	c35 N74-22095	Ultrasonically bonded valve assembly [NASA-CASE-NPO-13360-1]	c37 N75-25185
High isolation RF signal selection switches [NASA-CASE-NPO-13081-1]	c33 N74-22814	Vehicle locating system utilizing AM broadcasting station carriers [NASA-CASE-NPO-13217-1]	c32 N75-26194
Single reflector interference spectrometer and drive system therefor [NASA-CASE-NPO-11932-1]	c35 N74-23040	Asynchronous, multiplexing, single line transmission and recovery data system [NASA-CASE-NPO-13321-1]	c32 N75-26195
Scanning nozzle plating system [NASA-CASE-NPO-11758-1]	c31 N74-23065	Brazing alloy [NASA-CASE-NPO-03878]	c26 N75-27127
Rock sampling [NASA-CASE-NPO-10007-1]	c46 N74-23068	Very high intensity light source using a cathode ray tube [NASA-CASE-NPO-01296]	c33 N75-27250
Rock sampling [NASA-CASE-NPO-09755]	c46 N74-23069	Fluorescence detector for monitoring atmospheric pollutants [NASA-CASE-NPO-13231-1]	c45 N75-27585
Miniature multichannel bi-telemeter system [NASA-CASE-NPO-13065-1]	c52 N74-26625	Cooperative multi-axis sensor for teleoperation of article manipulating apparatus [NASA-CASE-NPO-13386-1]	c54 N75-27758
Dispensing targets for ion beam particle generators [NASA-CASE-NPO-13112-1]	c73 N74-26767	Heat sterilizable patient ventilator [NASA-CASE-NPO-13313-1]	c54 N75-27761
Optically detonated explosive device [NASA-CASE-NPO-11743-1]	c28 N74-27425	Low cost solar energy collection system [NASA-CASE-NPO-13579-1]	c44 N75-28519
High voltage, high current Schottky barrier solar cell [NASA-CASE-NPO-13482-1]	c44 N74-30448	Method of heat treating age-hardenable alloys [NASA-CASE-NPO-01311]	c26 N75-29236
Coherent receiver employing nonlinear coherence detection for carrier tracking [NASA-CASE-NPO-11921-1]	c32 N74-30523	Satellite aided vehicle avoidance system [NASA-CASE-NPO-10419-1]	c03 N75-30132
Digital servo control of random sound test excitation [NASA-CASE-NPO-11623-1]	c71 N74-31148	Refrigerated coaxial coupling [NASA-CASE-NPO-13504-1]	c33 N75-30430
Capacitance multiplier and filter synthesizing network [NASA-CASE-NPO-11948-1]	c33 N74-32712	Electric power generation system directory for laser power [NASA-CASE-NPO-13308-1]	c36 N75-30524
Apparatus for forming drive belts [NASA-CASE-NPO-13205-1]	c31 N74-32917	Subminiature insertable force transducer [NASA-CASE-NPO-13423-1]	c33 N75-31329
Tool for use in lifting pin supported objects [NASA-CASE-NPO-13157-1]	c37 N74-32918	Symmetrical odd-modulus frequency divider [NASA-CASE-NPO-13426-1]	c33 N75-31330
Preparing oxidizer coated metal fuel particles [NASA-CASE-NPO-11975-1]	c28 N74-33209	Stored charge transistor [NASA-CASE-NPO-11156-2]	c33 N75-31331
Geneva mechanism [NASA-CASE-NPO-13281-1]	c37 N75-13266	Doped Josephson tunneling junction for use in a sensitive IR detector [NASA-CASE-NPO-13348-1]	c33 N75-31332
Amino acid analysis [NASA-CASE-NPO-12130-1]	c25 N75-14844	Acoustically controlled distributed feedback laser [NASA-CASE-NPO-13175-1]	c36 N75-31427
Method of producing a storage bulb for an atomic hydrogen laser [NASA-CASE-NPO-13050-1]	c36 N75-15029	Inert gas metallic vapor laser [NASA-CASE-NPO-13449-1]	c36 N75-32441
Combined pressure regulator and shutoff valve [NASA-CASE-NPO-13201-1]	c37 N75-15050	High temperature resistant cermet and ceramic compositions [NASA-CASE-NPO-13690-1]	c27 N76-13294
Reduction of blood serum cholesterol [NASA-CASE-NPO-12119-1]	c52 N75-15270	Prevention of hydrogen embrittlement of high strength steel by hydrazine compositions [NASA-CASE-NPO-12122-1]	c24 N76-14203
Simultaneous acquisition of tracking data from two stations [NASA-CASE-NPO-13292-1]	c32 N75-15854	Helium refrigerator [NASA-CASE-NPO-13435-1]	c31 N76-14284
Soft X-ray laser using crystal channels as distributed feedback cavities [NASA-CASE-NPO-13532-1]	c36 N75-15973	Nonlinear nonsingular feedback shift registers [NASA-CASE-NPO-13451-1]	c33 N76-14373
Shock absorbing mount for electrical components [NASA-CASE-NPO-13253-1]	c37 N75-18573	Strain gage mounting assembly [NASA-CASE-NPO-13170-1]	c35 N76-14430
System for generating timing and control signals [NASA-CASE-NPO-13125-1]	c33 N75-19519	Interferometer mirror tilt correcting system [NASA-CASE-NPO-13687-1]	c35 N76-14433

Forward-scatter polarimeter for determining the gaseous depolarization factor in the presence of polluting polydispersed particles
[NASA-CASE-NPO-13756-1] c35 N76-14434

Thermostatically controlled non-tracking type solar energy concentrator
[NASA-CASE-NPO-13497-1] c44 N76-14602

Multi-computer multiple data path hardware exchange system
[NASA-CASE-NPO-13422-1] c60 N76-14818

Cermet composition and method of fabrication
[NASA-CASE-NPO-13120-1] c27 N76-15311

Dichroic plate
[NASA-CASE-NPO-13506-1] c35 N76-15435

Control for nuclear thermionic power source
[NASA-CASE-NPO-13114-2] c44 N76-15573

Utilization of oxygen difluoride for syntheses of fluorocyclomers
[NASA-CASE-NPO-12061-1] c27 N76-16228

Magnetometer using superconducting rotating body
[NASA-CASE-NPO-13388-1] c35 N76-16390

Scan converting video tape recorder
[NASA-CASE-NPO-10166-2] c35 N76-16391

Hydrogen rich gas generator
[NASA-CASE-NPO-13342-1] c37 N76-16446

A machine for use in monitoring fatigue life for a plurality of elastomeric specimens
[NASA-CASE-NPO-13731-1] c39 N76-17427

Automated system for identifying traces of organic chemical compounds in aqueous solutions
[NASA-CASE-NPO-13063-1] c25 N76-18245

Analog to digital converter
[NASA-CASE-NPO-13385-1] c33 N76-18345

Sampler of gas borne particles
[NASA-CASE-NPO-13396-1] c35 N76-18401

Stark-effect modulation of CO₂ laser with NH₂D
[NASA-CASE-NPO-11945-1] c36 N76-18427

Diffused waveguiding capillary tube with distributed feedback for a gas laser
[NASA-CASE-NPO-13544-1] c36 N76-18428

System for minimizing internal combustion engine pollutant emission
[NASA-CASE-NPO-13402-1] c37 N76-18457

Hydrogen-bromine secondary battery
[NASA-CASE-NPO-13237-1] c44 N76-18641

Hydrogen-rich gas generator
[NASA-CASE-NPO-13464-1] c44 N76-18642

Zinc-halide battery with molten electrolyte
[NASA-CASE-NPO-11961-1] c44 N76-18643

Priority interrupt system
[NASA-CASE-NPO-13067-1] c60 N76-18800

Acoustic energy shaping
[NASA-CASE-NPO-13802-1] c71 N76-18886

Miniature muscle displacement transducer
[NASA-CASE-NPO-13519-1] c33 N76-19338

Zero torque gear head wrench
[NASA-CASE-NPO-13059-1] c37 N76-20480

Method and apparatus for measurement of trap density and energy distribution in dielectric films
[NASA-CASE-NPO-13443-1] c76 N76-20994

Highly efficient antenna system using a corrugated horn and scanning hyperbolic reflector
[NASA-CASE-NPO-13568-1] c32 N76-21365

Indicator providing continuous indication of the presence of a specific pollutant in air
[NASA-CASE-NPO-13474-1] c45 N76-21742

Shared memory for a fault-tolerant computer
[NASA-CASE-NPO-13139-1] c60 N76-21914

Wind sensor
[NASA-CASE-NPO-13462-1] c35 N76-24524

Fiber distributed feedback laser
[NASA-CASE-NPO-13531-1] c36 N76-24553

Graphite reinforced bone cement
[NASA-CASE-NPO-13764-1] c24 N76-26281

Method and apparatus for automatic load sharing among paralleled converters
[NASA-CASE-NPO-13832-1] c33 N76-26393

Photoelectron spectrometer with means for stabilizing sample surface potential
[NASA-CASE-NPO-13772-1] c35 N76-26450

Portable, linear-focused solar thermal energy collecting system
[NASA-CASE-NPO-13734-1] c44 N76-26690

RF beam center location method and apparatus for power transmission system
[NASA-CASE-NPO-13821-1] c44 N76-26692

Method of forming a wick for a heat pipe
[NASA-CASE-NPO-13391-1] c34 N76-27515

Method and apparatus for nondestructive testing of pressure vessels
[NASA-CASE-NPO-12142-1] c38 N76-28563

Method and apparatus for generating coherent radiation in the ultra-violet region and above by use of distributed feedback
[NASA-CASE-NPO-13346-1] c36 N76-29575

Stirling cycle engine and refrigeration systems
[NASA-CASE-NPO-13613-1] c37 N76-29590

Hydrogen rich gas generator
[NASA-CASE-NPO-13342-2] c44 N76-29700

Solar-powered pump
[NASA-CASE-NPO-13567-1] c44 N76-29701

Hydrogen rich gas generator
[NASA-CASE-NPO-13464-2] c44 N76-29704

Myocardium wall thickness transducer and measuring method
[NASA-CASE-NPO-13644-1] c52 N76-29895

Catheter tip force transducer for cardiovascular research
[NASA-CASE-NPO-13643-1] c52 N76-29896

Real time analysis of voiced sounds
[NASA-CASE-NPO-13465-1] c32 N76-31372

Ultra stable frequency distribution system
[NASA-CASE-NPO-13836-1] c32 N76-31373

III-V photocathode with nitrogen doping for increased quantum efficiency
[NASA-CASE-NPO-12134-1] c33 N76-31409

High resolution Fourier interferometer-spectrophotopolarimeter
[NASA-CASE-NPO-13604-1] c35 N76-31490

Reflected-wave maser
[NASA-CASE-NPO-13490-1] c36 N76-31512

Independent gain and bandwidth control of a traveling wave maser
[NASA-CASE-NPO-13801-1] c36 N76-31514

Method of making hollow elastomeric bodies
[NASA-CASE-NPO-13535-1] c37 N76-31524

Solar cell grid patterns
[NASA-CASE-NPO-13087-2] c44 N76-31666

Furlable antenna
[NASA-CASE-NPO-13553-1] c33 N76-32457

Annular arc accelerator shock tube
[NASA-CASE-NPO-13528-1] c09 N77-10071

Cryostat system for temperatures on the order of 2 deg K or less
[NASA-CASE-NPO-13459-1] c31 N77-10229

The dc-to-ac converters employing staggered-phase power switches with two-loop control
[NASA-CASE-NPO-13512-1] c33 N77-10428

Ion and electron detector for use in an ICR spectrometer
[NASA-CASE-NPO-13479-1] c35 N77-10492

Hydrogen-rich gas generator
[NASA-CASE-NPO-13560-1] c44 N77-10636

Thin conformal antenna array for microwave power conversion
[NASA-CASE-NPO-13886-1] c32 N77-11269

Differential optoacoustic absorption detector
[NASA-CASE-NPO-13759-1] c35 N77-11363

Hydrogen-fueled engine
[NASA-CASE-NPO-13763-1] c37 N77-11398

Space communication system for compressed data with a concatenated Reed-Solomon-Viterbi coding channel
[NASA-CASE-NPO-13545-1] c32 N77-12240

Computer interface system
[NASA-CASE-NPO-13428-1] c60 N77-12741

High temperature oxidation resistant cermet compositions
[NASA-CASE-NPO-13666-1] c27 N77-13217

Frequency discriminator and phase detector circuit
[NASA-CASE-NPO-11515-1] c33 N77-13315

Mass spectrometer with magnetic pole pieces providing the magnetic fields for both the magnetic sector and an ion-type vacuum pump
[NASA-CASE-NPO-13663-1] c35 N77-14406

Thermocouple installation
[NASA-CASE-NPO-13540-1] c35 N77-14409

Method and apparatus for background signal reduction in opto-acoustic absorption measurement
[NASA-CASE-NPO-13683-1] c35 N77-14411

Multistation refrigeration system
[NASA-CASE-NPO-13839-1] c31 N77-15219

Electroexplosive device [NASA-CASE-NPO-13E58-1]	c28 N77-17258	Compact pulsed laser having improved heat conductance [NASA-CASE-NPO-13147-1]	c36 N77-25502
Surface roughness measuring system [NASA-CASE-NPO-13862-1]	c32 N77-17325	Internal combustion engine with electrostatic discharging fuels [NASA-CASE-NPO-13798-1]	c37 N77-25535
Swept group delay measurement [NASA-CASE-NPO-13909-1]	c33 N77-17358	Isotope separation using metallic vapor lasers [NASA-CASE-NPO-13550-1]	c36 N77-26477
Overload protection system for power inverter [NASA-CASE-NPO-13872-1]	c33 N77-17359	Distributed feedback acoustic surface wave oscillator [NASA-CASE-NPO-13673-1]	c71 N77-26919
Improved nozzle for use with abrasive and/or corrosive materials [NASA-CASE-NPO-13823-1]	c37 N77-17466	Penetrometer [NASA-CASE-NPO-11103-1]	c35 N77-27367
Process for purification of waste water produced by a Kraft process pulp and paper mill [NASA-CASE-NPO-13847-2]	c85 N77-17949	Conical scan tracking system employing a large antenna [NASA-CASE-NPO-14009-1]	c32 N77-28357
Nuclear thermionic converter [NASA-CASE-NPO-13211-1]	c73 N77-18891	Redundant RF system for space applications [NASA-CASE-NPO-13955-1]	c32 N77-28358
Passive intrusion detection system [NASA-CASE-NPO-13804-1]	c35 N77-19390	Method and apparatus for providing a servo drive signal in a high-speed stepping interferometer [NASA-CASE-NPO-13569-2]	c33 N77-28395
Continuous plasma laser [NASA-CASE-NPO-04167-3]	c36 N77-19416	Polymeric electrolytic hygrometer [NASA-CASE-NPO-13948-1]	c35 N77-28470
Charge transfer reaction laser with preionization means [NASA-CASE-NPO-13945-1]	c36 N77-19418	A non-tracking solar energy collector system [NASA-CASE-NPO-13817-1]	c44 N77-28583
A non-tracking solar energy collector system [NASA-CASE-NPO-13813-1]	c44 N77-19579	Solar pond [NASA-CASE-NPO-13581-2]	c44 N77-28584
Dual membrane, hollow fiber fuel cell [NASA-CASE-NPO-13732-1]	c44 N77-19581	A solar array strip and a method for forming the same [NASA-CASE-NPO-13652-1]	c44 N77-28585
Automated clinical system for chromosome analysis [NASA-CASE-NPO-13913-1]	c52 N77-19750	Lightweight reflector assembly [NASA-CASE-NPO-13707-1]	c74 N77-28933
Multiple rate digital command detection system with range clean-up capability [NASA-CASE-NPO-13753-1]	c32 N77-20289	Aldehyde-containing urea-absorbing polysaccharides [NASA-CASE-NPO-13620-1]	c27 N77-30236
Solar energy collection system [NASA-CASE-NPO-13579-2]	c44 N77-20565	Phase substitution of spare converter for a failed one of parallel phase staggered converters [NASA-CASE-NPO-13812-1]	c33 N77-30365
Low cost solar energy collection system [NASA-CASE-NPO-13579-3]	c44 N77-20566	A thermal energy transformer [NASA-CASE-NPO-14058-1]	c44 N77-30616
Charge storage diode modulators and demodulators [NASA-CASE-NPO-10189-1]	c33 N77-21314	Production of crystals from molten solutions [NASA-CASE-NPO-13969-2]	c76 N77-30984
Compact, high intensity arc lamp with internal magnetic field producing means [NASA-CASE-NPO-11510-1]	c33 N77-21315	Oil and fat absorbing polymers [NASA-CASE-NPO-11609-2]	c27 N77-31308
Depressurization of arc lamps [NASA-CASE-NPO-10790-1]	c33 N77-21316	Combustion engine [NASA-CASE-NPO-13671-1]	c37 N77-31497
Electromagnetic transducer recording head having a laminated core section and tapered gap [NASA-CASE-NPO-10711-1]	c35 N77-21392	An improved vehicular impact absorption system [NASA-CASE-NPO-14014-1]	c37 N77-31501
Cryogenic liquid sensor [NASA-CASE-NPO-10619-1]	c35 N77-21393	Apparatus for photon excited catalysis [NASA-CASE-NPO-13566-1]	c25 N77-32255
Uniform variable light source [NASA-CASE-NPO-11429-1]	c74 N77-21941	Strong thin membrane structure [NASA-CASE-NPO-14021-1]	c27 N77-32313
Durable antistatic coating for polymethylmethacrylate [NASA-CASE-NPO-13867-1]	c27 N77-22257	Charge-coupled device data processor for an airborne imaging radar system [NASA-CASE-NPO-13587-1]	c32 N77-32342
Arc control in compact arc lamps [NASA-CASE-NPO-10870-1]	c33 N77-22386	Circuit for automatic load sharing in parallel converter modules [NASA-CASE-NPO-14056-1]	c33 N77-32402
Adjustable chamfering tool [NASA-CASE-NPO-10857-1]	c37 N77-22478	Direct reading inductance meter [NASA-CASE-NPO-13792-1]	c35 N77-32455
Hydraulic drain means for servo-systems [NASA-CASE-NPO-10316-1]	c37 N77-22479	Solar photolysis of water [NASA-CASE-NPO-13675-1]	c44 N77-32580
Automated multi-level vehicle parking system [NASA-CASE-NPO-13058-1]	c37 N77-22480	Low to high temperature energy conversion system [NASA-CASE-NPO-13510-1]	c44 N77-32581
Solar hydrogen generator [NASA-CASE-NPO-11361-1]	c44 N77-22607	Solar energy collection system [NASA-CASE-NPO-13810-1]	c44 N77-32582
Sun direction detection system [NASA-CASE-NPO-13722-1]	c74 N77-22951	Three-dimensional tracking solar energy concentrator and method for making same [NASA-CASE-NPO-13736-1]	c44 N77-32583
Reflex feed system for dual frequency antenna [NASA-CASE-NPO-14022-1]	c32 N77-24338	Compact artificial hand [NASA-CASE-NPO-13906-1]	c54 N77-32723
Phase conjugation method and apparatus for an active retrodirective antenna array [NASA-CASE-NPO-13641-1]	c32 N77-24340	NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. WESTERN OPERATIONS OFFICE, SANTA MONICA, CALIF. Automatic pump Patent [NASA-CASE-NPO-04731]	c15 N71-24042
Digital demodulator-correlator [NASA-CASE-NPO-13982-1]	c32 N77-24341	NATIONAL BUREAU OF STANDARDS, BOULDER, COLO. Densitometer Patent [NASA-CASE-NPO-00688]	c14 N70-41330
Selective image area control of X-ray film exposure density [NASA-CASE-NPO-13808-1]	c35 N77-24456	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, BOULDER, COLO. Determining distance to lightning strokes from a single station [NASA-CASE-NPO-10698]	c07 N73-20175
Stabilization of He2(a-3 Sigma(+)) molecules in liquid helium by optical pumping for vacuum UV laser [NASA-CASE-NPO-13993-1]	c36 N77-24468	NATIONAL RESEARCH CORP., CAMBRIDGE, MASS. Gauge calibration by diffusion [NASA-CASE-NPO-07752]	c14 N73-30390
Double discharge metal vapor laser with metal halide as a lasant [NASA-CASE-NPO-13448-2]	c36 N77-24469	Ultrahigh vacuum measuring ionization gauge [NASA-CASE-NPO-05087]	c14 N73-30391
Sun tracking solar energy collector [NASA-CASE-NPO-13921-1]	c44 N77-24590		
Digital data reformatter/serializer [NASA-CASE-NPO-13676-1]	c60 N77-24781		
Nitramine propellants [NASA-CASE-NPO-14103-1]	c28 N77-25346		

- Apparatus for absolute pressure measurement
[NASA-CASE-LAR-10000] c14 N73-30394
Ultrahigh vacuum gauge having two collector
electrodes
[NASA-CASE-LAR-02743] c14 N73-32324
Rock sampling
[NASA-CASE-XNP-10007-1] c46 N74-23068
Rock sampling
[NASA-CASE-XNP-09755] c46 N74-23069
- NORTH AMERICAN AVIATION, INC., CANOGA PARK, CALIF.**
Method of joining aluminum to stainless steel
Patent
[NASA-CASE-MFS-07369] c15 N71-20443
Propellant mass distribution metering apparatus
Patent
[NASA-CASE-NFO-10185] c10 N71-26339
Safety-type locking pin
[NASA-CASE-MFS-18495] c15 N72-11385
Hydrogen fire detection system with logic
circuit to analyze the spectrum of temporal
variations of the optical spectrum
[NASA-CASE-MFS-13130] c10 N72-17173
- NORTH AMERICAN AVIATION, INC., DOWNEY, CALIF.**
Heat shield oven
[NASA-CASE-XMS-04318] c15 N69-27871
Extensible cable support Patent
[NASA-CASE-XNP-07587] c15 N71-18701
High pressure air valve Patent
[NASA-CASE-MSC-11010] c15 N71-19485
Load relieving device Patent
[NASA-CASE-XMS-06329-1] c15 N71-20441
Optical projector system Patent
[NASA-CASE-XNP-03853] c23 N71-21882
Brazing alloy Patent
[NASA-CASE-XNP-03063] c17 N71-23365
Vibrophonocardiograph Patent
[NASA-CASE-IPR-07172] c05 N71-27234
- NORTH AMERICAN AVIATION, INC., EL SEGUNDO, CALIF.**
Aerodynamic spike nozzle Patent
[NASA-CASE-IGS-01143] c31 N71-15647
Expanding center probe and drogue Patent
[NASA-CASE-XMS-03613] c31 N71-16346
Radio frequency shielded enclosure Patent
[NASA-CASE-XNP-09422] c07 N71-19436
High impedance measuring apparatus Patent
[NASA-CASE-XMS-08589-1] c09 N71-20569
Latching mechanism Patent
[NASA-CASE-XMS-03745] c15 N71-21076
Tube dimpling tool Patent
[NASA-CASE-XMS-06876] c15 N71-21536
Positive locking check valve Patent
[NASA-CASE-XMS-09310] c15 N71-22706
Etching of aluminum for bonding Patent
[NASA-CASE-XNP-02303] c17 N71-23828
Method and apparatus for varying thermal
conductivity Patent
[NASA-CASE-XNP-05524] c33 N71-24876
Purge device for thrust engines Patent
[NASA-CASE-XMS-04826] c28 N71-28849
Method and construction for protecting heat
sensitive bodies from thermal radiation and
convective heat Patent
[NASA-CASE-XNP-01310] c33 N71-28852
Propellant tank pressurization system Patent
[NASA-CASE-XNP-00650] c27 N71-28929
Spherical shield Patent
[NASA-CASE-XNP-01855] c15 N71-28937
Universal restrainer and joint Patent
[NASA-CASE-XNP-02278] c15 N71-28951
Method and device for cooling Patent
[NASA-CASE-BGN-00938] c33 N71-29053
- NORTH AMERICAN AVIATION, INC., LOS ANGELES, CALIF.**
Method and system for respiration analysis Patent
[NASA-CASE-IPR-08403] c05 N71-11202
- NORTH AMERICAN AVIATION, INC., TORRANCE, CALIF.**
Method and apparatus for detection and location
of microleaks Patent
[NASA-CASE-XNP-02307] c14 N71-10779
- NORTH AMERICAN ROCKWELL CORP., CANOGA PARK, CALIF.**
Noncontaminating swabs
[NASA-CASE-MFS-18100] c15 N72-11390
Observation window for a gas confining chamber
[NASA-CASE-NFO-10890] c11 N73-12265
Droplet monitoring probe
[NASA-CASE-NFO-10985] c14 N73-20478
Circuit board package with wedge shaped covers
[NASA-CASE-MFS-21919-1] c10 N73-25243
Heat flow calorimeter
[NASA-CASE-GSC-11434-1] c34 N74-27859
- NORTH AMERICAN ROCKWELL CORP., DOWNEY, CALIF.**
Spacecraft Patent
[NASA-CASE-MSC-13047-1] c31 N71-25434
Latching mechanism Patent
[NASA-CASE-MSC-15474-1] c15 N71-26162
Dye penetrant for surfaces subsequently
contacted by liquid oxygen Patent
[NASA-CASE-XNP-02221] c18 N71-27170
Frangible link
[NASA-CASE-MSC-11849-1] c15 N72-22488
Impact monitoring apparatus
[NASA-CASE-MSC-15626-1] c14 N72-25411
Bonding or repairing process
[NASA-CASE-MSC-12357] c15 N73-12489
Self-cycling fluid heater
[NASA-CASE-MSC-15567-1] c33 N73-16918
Phase protection system for ac power lines
[NASA-CASE-MSC-17832-1] c33 N74-14956
Apparatus for remote handling of materials
[NASA-CASE-LAR-10634-1] c37 N74-18123
Grain refinement control in TIG arc welding
[NASA-CASE-MSC-19095-1] c37 N75-19683
- NORTH AMERICAN ROCKWELL CORP., EL SEGUNDO, CALIF.**
Apparatus for testing wiring harness by
vibration generating means
[NASA-CASE-MSC-15158-1] c14 N72-17325
- NORTH AMERICAN ROCKWELL CORP., LOS ANGELES, CALIF.**
Tactile sensing means for prosthetic limbs
[NASA-CASE-MFS-16570-1] c05 N73-32013
- NORTH CAROLINA STATE UNIV., RALEIGH.**
Thermal shock resistant hafnia ceramic material
[NASA-CASE-LAR-10894-1] c18 N73-14584
Thermal shock and erosion resistant tantalum
carbide ceramic material
[NASA-CASE-LAR-11902-1] c27 N76-23436
- NORTHEASTERN UNIV., BOSTON, MASS.**
Pulse-width modulation multiplier Patent
[NASA-CASE-IER-09213] c07 N71-12390
- NORTHROP CORP., HAWTHORNE, CALIF.**
Shock tube bypass piston tunnel
[NASA-CASE-NFO-12109] c11 N72-22245
Folding structure fabricated of rigid panels
[NASA-CASE-XHQ-02146] c18 N75-27040
- NORTHROP ELECTRONICS, PALOS VERDES PENINSULA, CALIF.**
Method of making dry electrodes
[NASA-CASE-FRC-10029-2] c05 N72-25121
Valve seat
[NASA-CASE-NFO-10606] c15 N72-25451
- NORTHROP SPACE LABS., HAWTHORNE, CALIF.**
Method of evaluating moisture barrier properties
of encapsulating materials Patent
[NASA-CASE-NFO-10051] c18 N71-24934
- NORTHROP ELECTRONICS, PALOS VERDES PENINSULA, CALIF.**
Flexible conductive disc electrode Patent
[NASA-CASE-FRC-10029] c09 N71-24618
Gas low pressure low flow rate metering system
Patent
[NASA-CASE-FRC-10022] c12 N71-26546
Method of removing insulated material from
insulated wires
[NASA-CASE-FRC-10038] c15 N72-20444
- NOTRE DAME UNIV., IND.**
Synthesis of polymeric schiff bases by
schiff-base exchange reactions Patent
[NASA-CASE-XNP-08651] c06 N71-11236
Direct synthesis of polymeric schiff bases from
two amines and two aldehydes Patent
[NASA-CASE-XNP-08655] c06 N71-11239
Azine polymers and process for preparing the
same Patent
[NASA-CASE-XNP-08656] c06 N71-11242
Synthesis of polymeric schiff bases by reaction
of acetals and amine compounds Patent
[NASA-CASE-XNP-08652] c06 N71-11243
Aromatic diamine-aromatic dialdehyde high
molecular weight schiff base polymers prepared
in a monofunctional schiff base Patent
[NASA-CASE-XNP-03074] c06 N71-24740

O

OAKLAND UNIV., ROCHESTER, MICH.

- Optical process for producing classification
maps from multispectral data
[NASA-CASE-MSC-14472-1] c43 N77-10584
An interactive color display for multispectral
imagery using correlation clustering
[NASA-CASE-MSC-16253-1] c43 N77-31583

OHIO STATE UNIV., COLUMBUS.

Horn antenna having V-shaped corrugated slots
[NASA-CASE-LAR-11112-1] c32 N76-15330

OLD DOMINION UNIV., NORFOLK, VA.
Instrumentation for measuring aircraft noise and
sonic boom
[NASA-CASE-LAR-11476-1] c07 N76-27232

Differential sound level meter
[NASA-CASE-LAR-12106-1] c35 N77-23441

OREGON UNIV., PORTLAND.
Automatic fluid dispenser
[NASA-CASE-ARC-10820-1] c54 N75-32766

ORGANON DIAGNOSTICS, EL MONTE, CALIF.
Water system virus detection
[NASA-CASE-MSC-16098-1] c51 N77-24755

P

PACKARD-BELL ELECTRONICS CORP., NEWBURY PARK, CALIF.
Optical alignment system Patent
[NASA-CASE-XNP-02029] c14 N70-41955

PANAUHA CORP., PENNSAUKEN, N. J.
Method of forming transparent films of ZnO
[NASA-CASE-FEC-10019] c15 N73-12487

PENINSULAR CHEMISRESEARCH, INC., GAINESVILLE, FLA.
Hydroxy terminated perfluoro ethers Patent
[NASA-CASE-NFO-10768] c06 N71-27254

Perfluoro polyether acyl fluorides
[NASA-CASE-NFO-10765] c06 N72-20121

Polyurethane resins from hydroxy terminated
perfluoro ethers
[NASA-CASE-NFO-10768-2] c06 N72-27144

Highly fluorinated polyurethanes
[NASA-CASE-NFO-10767-2] c06 N72-27151

Highly fluorinated polyurethanes
[NASA-CASE-NFO-10767-1] c06 N73-33076

PHILCO-FORD CORP., HOUSTON, TEX.
Frequency modulation demodulator threshold
extension device Patent
[NASA-CASE-MSC-12165-1] c07 N71-33696

PHILCO-FORD CORP., NEWPORT BEACH, CALIF.
Mechanically extendible telescoping boom
[NASA-CASE-NFO-11118] c03 N72-25021

PHILCO-FORD CORP., PALO ALTO, CALIF.
Composite antenna feed
[NASA-CASE-GSC-11046-1] c07 N73-28013

Amplitude steered array
[NASA-CASE-GSC-11446-1] c33 N74-20860

PITTSBURGH UNIV., PA.
Device for the detection of phenol and related
compounds
[NASA-CASE-LEW-12513-1] c25 N77-18238

PRATT AND WHITNEY AIRCRAFT, EAST HARTFORD, CONN.
Liquid-gas separation system Patent
[NASA-CASE-XMS-01624] c15 N70-40062

Vibration damping system Patent
[NASA-CASE-XMS-01620] c23 N71-15673

Vapor pressure measuring system and method Patent
[NASA-CASE-XMS-01618] c14 N71-20741

Sealing member and combination thereof and
method of producing said sealing member Patent
[NASA-CASE-XMS-01625] c15 N71-23022

Q

QUANTUM DYNAMICS, TARZANA, CALIF.
Respiratory analysis system and method
[NASA-CASE-MSC-13436-1] c05 N73-32015

R

RADIATION, INC., BELBOURNE, FLA.
Remote platform power conserving system
[NASA-CASE-GSC-11182-1] c15 N75-13007

RADIATION INSTRUMENT DEVELOPMENT LAB., INC.,
MELROSE PARK, ILL.
High speed binary to decimal conversion system
Patent
[NASA-CASE-XGS-01230] c08 N71-19544

RADIATION SYSTEMS, INC., MELBURN, VA.
Micropulse tracking system Patent
[NASA-CASE-XGS-01155] c10 N71-21483

RADIO CORP. OF AMERICA, LANCASTER, PA.
Bonding graphite with fused silver chloride
[NASA-CASE-XGS-00963] c15 N69-39735

RADIO CORP. OF AMERICA, NEW YORK.

Water cooled contactor for anode in carbon arc
mechanism
[NASA-CASE-XMS-03700] c15 N69-24266

Apparatus for ballasting high frequency
transistors
[NASA-CASE-XGS-05003] c09 N69-24318

Helical coaxial resonator RF filter
[NASA-CASE-XGS-02816] c07 N69-24323

Radiation resistant silicon semiconductor
devices Patent
[NASA-CASE-XGS-07801] c09 N71-12513

GaAs solar detector using manganese as a doping
agent Patent
[NASA-CASE-XNP-01328] c26 N71-18064

Thermocouple assembly Patent
[NASA-CASE-XNP-01659] c14 N71-23039

Method of erasing target material of a vidicon
tube or the like Patent
[NASA-CASE-XNP-06028] c09 N71-23189

Transient augmentation circuit for pulse
amplifiers Patent
[NASA-CASE-XNP-01068] c10 N71-28739

RADIO CORP. OF AMERICA, PRINCETON, N. J.
Connector strips-positive, negative and T tabs
[NASA-CASE-XGS-01395] c03 N69-21539

Solar cell including second surface mirrors Patent
[NASA-CASE-NFO-10109] c03 N71-11049

Collapsible reflector Patent
[NASA-CASE-XMS-03454] c09 N71-20658

Simple method of making photovoltaic junctions
Patent
[NASA-CASE-XNP-01960] c09 N71-23027

Method of electrolytically binding a layer of
semiconductors together Patent
[NASA-CASE-XNP-01959] c26 N71-23043

Method and apparatus for distillation of liquids
Patent
[NASA-CASE-XNP-08124] c15 N71-27184

Maximum power point tracker Patent
[NASA-CASE-GSC-10376-1] c14 N71-27407

Method of changing the conductivity of vapor
deposited gallium arsenide by the introduction
of water into the vapor deposition atmosphere
Patent
[NASA-CASE-XNP-01961] c26 N71-29156

Radial heat flux transformer
[NASA-CASE-NFO-10828] c33 N72-17948

Target acquisition antenna
[NASA-CASE-GSC-10064-1] c10 N74-22235

Method for distillation of liquids
[NASA-CASE-XNP-08124-2] c06 N73-13129

Hermetically sealed semiconductor
[NASA-CASE-GSC-10791-1] c15 N73-14469

Thermal flux transfer system
[NASA-CASE-NFO-12070-1] c28 N73-32606

Rotary solenoid shutter drive assembly and
rotary inertia damper and stop plate assembly
[NASA-CASE-GSC-11560-1] c33 N74-20861

Frequency measurement by coincidence detection
with standard frequency
[NASA-CASE-MSC-14649-1] c33 N76-16331

RAND CORP., SANTA MONICA, CALIF.
Satellite communication system Patent
[NASA-CASE-XNP-02389] c07 N71-28900

RAYMOND ENGINEERING LAB., INC., MIDDLETOWN, CONN.
Synchronous servo loop control system Patent
[NASA-CASE-XNP-03744] c10 N71-20448

RAYTHEON CO., SUDBURY, MASS.
Laser Doppler system for measuring three
dimensional vector velocity Patent
[NASA-CASE-MFS-20386] c21 N71-19212

Clear air turbulence detector
[NASA-CASE-MFS-21244-1] c36 N75-15028

RCA SERVICE CO., INC., CAMDEN, N. J.
Apparatus for inspecting microfilm Patent
[NASA-CASE-MFS-20240] c14 N71-26788

RENSSELAIRE POLYTECHNIC INST., TROY, N. Y.
Coincidence apparatus for detecting particles
[NASA-CASE-ILA-07813] c14 N72-17328

RESEARCH TRIANGLE INST., DURHAM, N. C.
Semiconductor p-n junction stress and strain
sensor
[NASA-CASE-ILA-04980] c09 N69-27422

ROCHESTER UNIV., N. Y.
Concave grating spectrometer Patent
[NASA-CASE-XGS-01036] c14 N70-40003

ROCKETDYNE, CANOGA PARK, CALIF.
Frequency to analog converter Patent

[NASA-CASE-XNP-07040] c08 N71-12500
 Load cell protection device Patent
 [NASA-CASE-XMS-06782] c32 N71-15974
 Thermobull mount Patent
 [NASA-CASE-NFO-10158] c33 N71-16356
 Laminar flow enhancement Patent
 [NASA-CASE-NFO-10122] c12 N71-17631
 Temperature sensitive flow regulator Patent
 [NASA-CASE-MFS-14259] c15 N71-19213
 Hydrogen leak detection device Patent
 [NASA-CASE-MFS-11537] c14 N71-20442
 Technique of elbow bending small jacketed
 transfer lines Patent
 [NASA-CASE-XNP-10475] c15 N71-24679
 Gas liquefaction and dispensing apparatus Patent
 [NASA-CASE-NFO-10C70] c15 N71-27372
 Locking device for turbine rotor blades Patent
 [NASA-CASE-XNP-00816] c28 N71-28928
 Laser camera and diffusion filter therefore Patent
 [NASA-CASE-NFO-10417] c16 N71-33410
 Hydrazinium nitroformate propellant stabilized
 with nitroguanidine
 [NASA-CASE-NFO-12000] c27 N72-25699
 Hydrazinium nitroformate propellant with
 saturated polymeric hydrocarbon binder
 [NASA-CASE-NFO-12015] c27 N73-16764
 Novel polymers and method of preparing same
 [NASA-CASE-NFO-10998-1] c06 N73-32029
 Internally supported flexible duct joint
 [NASA-CASE-MFS-19193-1] c37 N75-19686
 Method of heat treating age-hardenable alloys
 [NASA-CASE-XNP-01311] c26 N75-29236
 Thrust measurement
 [NASA-CASE-XMS-05731] c35 N75-29382
 Device for installing rocket engines
 [NASA-CASE-MFS-19220-1] c20 N76-22296
 Laser extensometer
 [NASA-CASE-MFS-19259-1] c36 N77-10516
ROCKWELL INTERNATIONAL CORP., CANOGA PARK, CALIF.
 Brazing alloy binder
 [NASA-CASE-XNP-05868] c26 N75-27125
 Brazing alloy composition
 [NASA-CASE-XNP-06053] c26 N75-27126
 Brazing alloy
 [NASA-CASE-XNP-03878] c26 N75-27127
 Method and apparatus for vibration analysis
 utilizing the Mossbauer effect
 [NASA-CASE-XNP-05882] c35 N75-27329
 Externally supported internally stabilized
 flexible duct joint
 [NASA-CASE-MFS-19194-1] c37 N76-14460
 Accumulator
 [NASA-CASE-MFS-19287-1] c34 N77-30399
ROCKWELL INTERNATIONAL CORP., DOWNEY, CALIF.
 Insulation for piping
 [NASA-CASE-MSC-19523-1] c31 N76-16245
 Apparatus for positioning modular components on
 a vertical or overhead surface
 [NASA-CASE-LAR-11465-1] c37 N76-21554
 Flexible pile thermal barrier seal
 [NASA-CASE-MSC-19568-1] c37 N76-23585
 Method of producing complex aluminum alloy parts
 of high temper, and products thereof
 [NASA-CASE-MSC-19693-1] c26 N76-29401
 Adjustable securing base
 [NASA-CASE-MSC-19666-1] c37 N76-31529
 Flanged major modular assembly jig
 [NASA-CASE-MSC-19372-1] c39 N76-31562
 Aircraft-mounted crash-activated transmitter
 device
 [NASA-CASE-MFS-16609-3] c03 N76-32140
 Window defect planar mapping technique
 [NASA-CASE-MSC-19442-1] c74 N77-10899
 Multi-purpose wind tunnel reaction control model
 block
 [NASA-CASE-MSC-19706-1] c09 N77-19077
 Sequencing device utilizing planetary gear set
 [NASA-CASE-MSC-19514-1] c37 N77-19459
 Mechanical sequencer
 [NASA-CASE-MSC-19536-1] c37 N77-22482
 Non-floating universal joint
 [NASA-CASE-MSC-19586-1] c37 N77-25536
 Load regulating latch
 [NASA-CASE-MSC-19535-1] c37 N77-32499
ROPH CORP., CHULA VISTA, CALIF.
 Method of forming shapes from planar sheets of
 thermosetting materials
 [NASA-CASE-NFO-11036] c15 N72-24522

ROYAL AIRCRAFT ESTABLISHMENT, FARNBOROUGH (ENGLAND).
 Garments for controlling the temperature of the
 body Patent
 [NASA-CASE-XMS-10269] c05 N71-24147
RYAN AERONAUTICAL CO., SAN DIEGO, CALIF.
 Wing deployment method and apparatus Patent
 [NASA-CASE-XMS-00907] c02 N70-41630
 Masking device Patent
 [NASA-CASE-XNP-02092] c15 N70-42033

S

SANDERS ASSOCIATES, INC., NASHUA, N. H.
 Increasing efficiency of switching type
 regulator circuits Patent
 [NASA-CASE-XMS-09352] c09 N71-23316
SANTA BARBARA RESEARCH CENTER, GOLETA, CALIF.
 Camera arrangement
 [NASA-CASE-GSC-12032-2] c35 N76-19408
SANTA CLARA UNIV., CALIF.
 Reversed cowl flap inlet thrust augmentor
 [NASA-CASE-ARC-10754-1] c07 N75-24736
 Noise suppressor for turbo fan jet engines
 [NASA-CASE-ARC-10812-1] c07 N76-18131
 System for measuring Reynolds in a turbulently
 flowing fluid
 [NASA-CASE-ARC-10755-2] c34 N76-27517
 System for measuring three fluctuating velocity
 components in a turbulently flowing fluid
 [NASA-CASE-ARC-10974-1] c34 N77-27345
SCHJELDAHL (G. T.) CO., NORTHEFIELD, MINN.
 Rotating mandrel for assembly of inflatable
 devices Patent
 [NASA-CASE-XLA-04143] c15 N71-17687
 Traveling sealer for contoured table Patent
 [NASA-CASE-XLA-01494] c15 N71-24164
SCIENCE APPLICATIONS, INC., LA JOLLA, CALIF.
 Process for producing flame resistant polyamides
 and products produced thereby
 [NASA-CASE-MSC-16074-1] c27 N77-14262
SCOTT AVIATION CORP., LANCASTER, N. Y.
 Self-contained breathing apparatus
 [NASA-CASE-MSC-14733-1] c54 N76-24900
SERV-ATR, INC., HOUSTON, TEX.
 Stator rotor tools
 [NASA-CASE-MSC-16000-1] c07 N77-13062
SIKORSKY AIRCRAFT, STRATFORD, CONN.
 Automatically lockable axially extensible strut
 [NASA-CASE-LAR-11900-1] c05 N77-18134
SINGER-GENERAL PRECISION, INC., BINGHAMTON, N. Y.
 CRT blanking and brightness control circuit
 [NASA-CASE-KSC-10647-1] c10 N72-31273
SMITH ELECTRONICS, INC., CLEVELAND, OHIO.
 Phase detector assembly Patent
 [NASA-CASE-XNP-00701] c09 N70-40272
SMITHSONIAN ASTROPHYSICAL OBSERVATORY, CAMBRIDGE, MASS.
 Atomic hydrogen maser with bulb temperature
 control to remove wall shift in maser output
 frequency
 [NASA-CASE-HQN-10654-1] c16 N73-13489
 Tunable cavity resonator with ramp shaped supports
 [NASA-CASE-HQN-10790-1] c36 N74-11313
SOLID STATE RADIATIONS, INC., LOS ANGELES, CALIF.
 Biomedical radiation detecting probe Patent
 [NASA-CASE-XMS-01177] c05 N71-19440
SOUTHERN METHODIST UNIV., DALLAS, TEX.
 Growth of gallium nitride crystals
 [NASA-CASE-LAR-11302-1] c25 N75-13054
 Improved low cost substrates for polycrystalline
 solar cells
 [NASA-CASE-GSC-12022-2] c44 N76-26695
SPACE SCIENCES, INC., WALTHAM, MASS.
 Doppler shift system
 [NASA-CASE-HQN-10740-1] c72 N74-19310
SPACE TECHNOLOGY LABS., INC., REDONDO BEACH, CALIF.
 Method and apparatus for measuring potentials in
 plasmas Patent
 [NASA-CASE-XLE-00821] c25 N71-15650
 AC logic flip-flop circuits Patent
 [NASA-CASE-XGS-00823] c10 N71-15910
 Apparatus for field strength measurement of a
 space vehicle Patent
 [NASA-CASE-XLP-00820] c14 N71-16014
 Hermetically sealed explosive release mechanism
 Patent
 [NASA-CASE-XGS-00824] c15 N71-16078
 Apparatus for measuring electric field strength
 on the surface of a model vehicle Patent

- [NASA-CASE-XLE-02038] c09 N71-16086
 Sclar cell mounting Patent
 [NASA-CASE-XNP-00826] c03 N71-20895
 Prestressed refractory structure Patent
 [NASA-CASE-XNP-02888] c18 N71-21068
 Linear accelerator frequency control system Patent
 [NASA-CASE-XGS-05441] c10 N71-22962
 Fluid lubricant system Patent
 [NASA-CASE-XNP-03972] c15 N71-23048
 Compensating bandwidth switching transients in an amplifier circuit Patent
 [NASA-CASE-XNP-01107] c10 N71-28859
SPACELABS, INC., VAN NUYS, CALIF.
 Peak polarity selector Patent
 [NASA-CASE-FRC-10010] c10 N71-24862
 Respirator monitor
 [NASA-CASE-FRC-10012] c14 N72-17329
SPACO, INC., HUNTSVILLE, ALA.
 Sight switch using an infrared source and sensor Patent
 [NASA-CASE-XMF-03934] c09 N71-22985
 Method and device for detecting voids in low density material Patent
 [NASA-CASE-MFS-20044] c14 N71-28993
SPECTRA-PHYSICS, INC., MOUNTAIN VIEW, CALIF.
 Optically pumped resonance magnetometer for determining vectorial components in a spatial coordinate system Patent
 [NASA-CASE-XGS-04879] c14 N71-20428
SPECTROLAB, INC., SYLMAR, CALIF.
 Ultraviolet filter
 [NASA-CASE-XNP-02340] c23 N69-24332
 Central spar and module joint Patent
 [NASA-CASE-XNP-02341] c15 N71-21531
 Apparatus for applying cover slides
 [NASA-CASE-NFO-10575] c03 N72-25019
SPERRY GYROSCOPE CO., GREAT NECK, N. Y.
 Automatic gain control system
 [NASA-CASE-XMS-05307] c09 N69-24330
SPERRY RAND CORP., BLUE BELL, PA.
 Flipflop interrogator and bi-polar current driver Patent
 [NASA-CASE-XGS-03058] c10 N71-19547
SPERRY RAND CORP., HUNTSVILLE, ALA.
 Optical tracking mount Patent
 [NASA-CASE-MFS-14017] c14 N71-26627
 Collapsible antenna boom and transmission line Patent
 [NASA-CASE-MFS-20068] c07 N71-27191
 Device for handling printed circuit cards Patent
 [NASA-CASE-MFS-20453] c15 N71-29133
 Frequency division multiplex technique
 [NASA-CASE-KSC-10521] c07 N73-20176
 Device for configuring multiple leads
 [NASA-CASE-MFS-22133-1] c33 N74-26977
 System for enhancing tool-exchange capabilities of a portable wrench
 [NASA-CASE-MFS-22283-1] c37 N75-33395
 Remotely operable articulated manipulator
 [NASA-CASE-MFS-22707-1] c37 N76-15457
 FM/CW radar system
 [NASA-CASE-MFS-22234-1] c32 N76-33364
 Photovoltaic cell array
 [NASA-CASE-MFS-22458-1] c44 N77-10635
 Notch filter
 [NASA-CASE-MFS-23303-1] c32 N77-18307
 Three-mirror telescope
 [NASA-CASE-MFS-23675-1] c74 N77-28937
SPERRY RAND CORP., PHOENIX, ARIZ.
 Isolation coupling arrangement for a torque measuring system
 [NASA-CASE-XIA-04897] c15 N72-22482
STANFORD RESEARCH INST., MENLO PARK, CALIF.
 Automatic fault correction system for parallel signal channels Patent
 [NASA-CASE-XNP-03263] c09 N71-18843
 Mercury capillary interrupter Patent
 [NASA-CASE-XNP-02251] c12 N71-20896
 Magnetic power switch Patent
 [NASA-CASE-NFO-10242] c09 N71-24803
 Procedure and apparatus for determination of water in nitrogen tetroxide
 [NASA-CASE-NFO-10234] c06 N72-17094
STANFORD UNIV., CALIF.
 Active RC networks
 [NASA-CASE-ARC-10042-2] c10 N72-11256
 Multiloop RC active filter apparatus having low parameter sensitivity with low amplifier gain
 [NASA-CASE-ARC-10192] c09 N72-21245
 Spacecraft attitude control method and apparatus
 [NASA-CASE-HQN-10439] c21 N72-21624
 Laser system with an antiresonant optical ring
 [NASA-CASE-HQN-10844-1] c36 N75-19653
 Traveling wave solid state amplifier utilizing a semiconductor with negative differential mobility
 [NASA-CASE-HQN-10069] c33 N75-27251
 An improved controller arm for a remotely related slave arm
 [NASA-CASE-ARC-11052-1] c54 N77-30751
STANFORD UNIV., PALO ALTO, CALIF.
 RC networks and amplifiers employing the same
 [NASA-CASE-XAC-05462-2] c10 N72-17171
STATE UNIV. OF IOWA, IOWA CITY.
 Mixture separation cell Patent
 [NASA-CASE-XMS-02952] c18 N71-20742
SYLVANIA ELECTRONIC SYSTEMS-CENTRAL, WILLIAMSVILLE, N. Y.
 Acquisition and tracking system for optical radar
 [NASA-CASE-MFS-20125] c16 N72-13437
 Altitude sensing device
 [NASA-CASE-XMS-01994-1] c14 N72-17326
- T**
- TAAG DESIGNS, INC., COLLEGE PARK, MD.**
 Recovery of radiation damaged solar cells through thermal annealing
 [NASA-CASE-XGS-04047-2] c03 N72-11062
 Phototropic composition of matter
 [NASA-CASE-XGS-03736] c14 N72-22443
TAFT BROADCASTING CORP., HOUSTON, TEX.
 Television noise reduction device
 [NASA-CASE-MSC-12607-1] c32 N75-21485
TANABACK SCIENTIFIC CO., INC., ORANGE, CALIF.
 Detector absorptivity measuring method and apparatus
 [NASA-CASE-LAR-10907-1] c35 N76-29551
TECHNICOLOR, INC., PARAMUS, N.J.
 Automatic lightning detection and photographic system
 [NASA-CASE-KSC-10728-1] c14 N73-32319
TECHNIDINE, INC., WEST CHESTER, PA.
 Methods and apparatus employing vibratory energy for wrenching Patent
 [NASA-CASE-MFS-20586] c15 N71-17686
TECHNOLOGY, INC., HOUSTON, TEX.
 Apparatus and method for processing Korotkov sounds
 [NASA-CASE-MSC-13999-1] c52 N74-26626
TECHNOLOGY, INC., SAN ANTONIO, TEX.
 Contourgraph system for monitoring electrocardiograms
 [NASA-CASE-MSC-13407-1] c10 N72-20225
 Modification of the physical properties of freeze-dried rice
 [NASA-CASE-MSC-13540-1] c05 N72-33096
TELEDINE BROWN ENGINEERING, HUNTSVILLE, ALA.
 Self-recording portable soil penetrometer
 [NASA-CASE-MFS-20774] c14 N73-19420
TEMPLE UNIV. RESEARCH INST., PHILADELPHIA, PA.
 Barium release system
 [NASA-CASE-LAR-10670-1] c06 N73-30097
 Rocket having barium release system to create ion clouds in the upper atmosphere
 [NASA-CASE-LAR-10670-2] c15 N74-27360
TEXAS A&M UNIV., COLLEGE STATION.
 An improved method and apparatus for use in examining the lattice of a semiconductor wafer by X-ray diffraction
 [NASA-CASE-MFS-23315-1] c76 N76-32029
TEXAS INSTRUMENTS, INC., DALLAS.
 Integrated circuit including field effect transistor and cermet resistor
 [NASA-CASE-GSC-10835-1] c09 N72-33205
TEXAS TECHNOLOGICAL UNIV., LUBBOCK.
 Insulated electrocardiographic electrodes
 [NASA-CASE-MSC-14339-1] c05 N75-24716
THIokol CHEMICAL CORP., BRISTOL, PA.
 Casting propellant in rocket engine
 [NASA-CASE-LAR-11995-1] c28 N77-10213
TRANS-SONICS, INC., LEXINGTON, MASS.
 Capacitive tank gaging apparatus being independent of liquid distribution
 [NASA-CASE-MFS-21629] c14 N72-22442
TRIDENT ENGINEERING ASSOCIATES, INC., ANNAPOLIS, MD.
 Spectroscope equipment using a slender cylindrical reflector as a substitute for a

slit Patent
[NASA-CASE-XGS-08269] c23 N71-26206
TRW EQUIPMENT LABS., CLEVELAND, OHIO.
Pulsed energy power system Patent
[NASA-CASE-MSC-13112] c03 N71-11057
TRW, INC., REDONDO BEACH, CALIF.
Method of and device for determining the
characteristics and flux distribution of
micrometeorites
[NASA-CASE-NFO-12127-1] c91 N74-13130
Reinforced structural plastics
[NASA-CASE-LFW-10199-1] c27 N74-23125
Capillary flow weld-bonding
[NASA-CASE-LAR-11726-1] c37 N76-27568
TRW SYSTEMS, REDONDO BEACH, CALIF.
Electromechanical actuator
[NASA-CASE-XNP-05975] c15 N69-23185
Control valve and co-axial variable injector
Patent
[NASA-CASE-XNP-09702] c15 N71-17654
Multiple orifice throttle valve Patent
[NASA-CASE-XNP-09698] c15 N71-18580
Semitoroidal diaphragm cavitating valve Patent
[NASA-CASE-XNP-09704] c12 N71-18615
Electrohydrodynamic control valve Patent
[NASA-CASE-NFO-10416] c12 N71-27332
Low thrust rocketpropellant engine
[NASA-CASE-GSC-12194-1] c20 N77-28219
TRW SYSTEMS GROUP, REDONDO BEACH, CALIF.
Ablative resin Patent
[NASA-CASE-XIE-05913] c33 N71-14032
Passive caging mechanism Patent
[NASA-CASE-GSC-10306-1] c15 N71-24694
Multiple varactor frequency doubler
Patent
[NASA-CASE-XNP-04958-1] c10 N71-26414
Booster tank system Patent
[NASA-CASE-MSC-12390] c27 N71-29155
Resonant ultrasonic gauging apparatus
[NASA-CASE-MSC-11847-1] c14 N72-11363
Wide range analog-to-digital converter with a
variable gain amplifier
[NASA-CASE-NFO-11018] c08 N72-21200
System for preconditioning a combustible vapor
[NASA-CASE-NFO-12072] c28 N72-22772
Fail-safe multiple transformer circuit
configuration
[NASA-CASE-NFO-11078] c09 N72-25262
Digital control and information system
[NASA-CASE-NFO-11016] c08 N72-31226
Ultrasonically bonded valve assembly
[NASA-CASE-NFO-13360-1] c37 N75-25185
Cosmic dust analyzer
[NASA-CASE-MSC-13802-2] c35 N76-15431
Weld-bonded titanium structures
[NASA-CASE-LAR-11549-1] c37 N77-11397
Flat-plate heat pipe
[NASA-CASE-GSC-11998-1] c34 N77-32413
Spatial filter for Q-switched lasers
[NASA-CASE-LFW-12168-1] c36 N77-32478
TYCO LABS., INC., WALTHAM, MASS.
Bonding thermoelectric elements to nonmagnetic
refractory metal electrodes
[NASA-CASE-XGS-04554] c15 N69-39786
Segmenting lead telluride-silicon germanium
thermoelements Patent
[NASA-CASE-XGS-05718] c26 N71-16037

U

ULTRASISTEMS, INC., IRVINE, CALIF.
Heat resistant polymers of oxidized
styrylphosphine
[NASA-CASE-MSC-14903-1] c27 N76-28425
UNIFIED SCIENCE ASSOCIATES, INC., PASADENA, CALIF.
Method of producing crystalline materials
[NASA-CASE-NFO-10440] c15 N72-21466
UNION CARBIDE CORP., NEW YORK.
Laser apparatus for removing material from
rotating objects Patent
[NASA-CASE-NFS-11279] c16 N71-20400
UNITED AIRCRAFT CORP., EAST HARTFORD, CONN.
Supporting and protecting device Patent
[NASA-CASE-XNP-00580] c11 N70-35383
Spherical tank gauge Patent
[NASA-CASE-XNS-06236] c14 N71-21007
Omnidirectional joint Patent
[NASA-CASE-XNS-09635] c05 N71-24623
Preshortened convolute section for a
pressurized suit Patent

[NASA-CASE-XNS-09637-1] c05 N71-24730
Tertiary flow injection thrust vectoring system
Patent
[NASA-CASE-NFS-20831] c28 N71-29153
Restraint torso for a pressurized suit
[NASA-CASE-MSC-12397-1] c05 N72-25119
UNITED AIRCRAFT CORP., STRATFORD, CONN.
Bonded joint and method
[NASA-CASE-LAR-10900-1] c37 N74-23064
UNITED AIRCRAFT CORP., WEST PALM BEACH, FLA.
Inherent redundancy electric heater
[NASA-CASE-NFS-21462-1] c33 N74-14935
UNITED AIRCRAFT CORP., WINDSOR LOCKS, CONN.
Water separating system Patent
[NASA-CASE-XNS-13052] c14 N71-20427
Method of forming a root cord restrained
convolute section
[NASA-CASE-MSC-12398] c05 N72-20098
UNITED TECHNOLOGY CENTER, SUDBURY, CALIF.
Solid propellant liner Patent
[NASA-CASE-XNP-09744] c27 N71-16392

V

VAPOR CORP., CHICAGO, ILL.
Method and apparatus for controllably heating
fluid Patent
[NASA-CASE-XNP-04237] c33 N71-16278
VARIAN ASSOCIATES, PALO ALTO, CALIF.
High power-high voltage waterload Patent
[NASA-CASE-XNP-05381] c09 N71-20842
III-V photocathode with nitrogen doping for
increased quantum efficiency
[NASA-CASE-NFO-12134-1] c33 N76-31409
VIRGINIA POLYTECHNIC INST. AND STATE UNIV.,
BLACKSBURG.
Logarithmic circuit with wide dynamic range
[NASA-CASE-GSC-12145-1] c33 N77-19319
Very narrow band width receiver
[NASA-CASE-GSC-12142-1] c32 N77-20299
VIRGINIA UNIV., CHARLOTTESVILLE.
Depositing semiconductor films utilizing a
thermal gradient
[NASA-CASE-XNS-04614] c15 N69-21460
Active microwave iris and windows
[NASA-CASE-LAR-10513-1] c07 N72-25170
Thin film microwave iris
[NASA-CASE-LAR-10511-1] c09 N72-29172
Apparatus for measuring a sorbate dispersed in a
fluid stream
[NASA-CASE-ARC-10896-1] c34 N75-32389
VIVONEX CORP., MOUNTAIN VIEW, CALIF.
Amino acid analysis
[NASA-CASE-NFO-12130-1] c25 N75-14844

W

WEBER AIRCRAFT CORP., BURBANK, CALIF.
Articulated multiple couch assembly Patent
[NASA-CASE-MSC-11253] c05 N71-12343
Device for separating occupant from an ejection
seat Patent
[NASA-CASE-XNS-04625] c05 N71-20718
Collapsible Apcllo couch
[NASA-CASE-MSC-13140] c05 N72-11085
WESTINGHOUSE ELECTRIC CORP., BALTIMORE, MD.
Broadband choke for antenna structure
[NASA-CASE-XNS-05303] c07 N69-27462
Electronic background suppression method and
apparatus for a field scanning sensor
[NASA-CASE-XGS-05211] c07 N69-39980
Solid-state current transformer
[NASA-CASE-NFS-22560-1] c33 N77-14335
WESTINGHOUSE ELECTRIC CORP., HUNTSVILLE, ALA.
Solid state television camera system Patent
[NASA-CASE-XNP-06092] c07 N71-24612
Phototransistor
[NASA-CASE-NFS-20407] c09 N73-19235
WESTINGHOUSE ELECTRIC CORP., LIMA, OHIO.
Transistor drive regulator Patent
[NASA-CASE-LFW-10233] c10 N71-27126
WESTINGHOUSE ELECTRIC CORP., PITTSBURGH, PA.
Linear sawtooth voltage-wave generator employing
transistor timing circuit having
capacitor-zener diode combination feedback
Patent
[NASA-CASE-XNS-01315] c09 N70-41675
Thermal conductive connection and method of
making same Patent

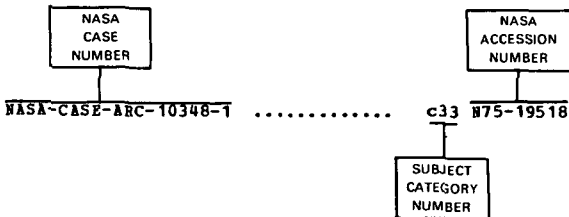
[NASA-CASE-XMS-02087] c09 N70-41717
 Gas cooled high temperature thermocouple Patent
 [NASA-CASE-XIF-09475-1] c33 N71-15568
 High resolution developing of photosensitive
 resists Patent
 [NASA-CASE-XGS-04993] c14 N71-17574
 Regulated power supply Patent
 [NASA-CASE-XMS-01991] c09 N71-21449
 Pulse modulator providing fast rise and fall
 times Patent
 [NASA-CASE-XMS-04919] c09 N71-23270
 Extended area semiconductor radiation detectors
 and a novel readout arrangement Patent
 [NASA-CASE-XGS-03230] c14 N71-23401
 Frequency shift keying apparatus Patent
 [NASA-CASE-XGS-01537] c07 N71-23405
 Phase locked phase modulator including a voltage
 controlled oscillator Patent
 [NASA-CASE-XMP-05382] c10 N71-23544
 Bearing and gimbal lock mechanism and spiral
 flex lead module Patent
 [NASA-CASE-GSC-10556-1] c31 N71-26537
 Multiple slope sweep generator Patent
 [NASA-CASE-XMS-03542] c09 N71-28926
 Self-adjusting multisegment, deployable, natural
 circulation radiator Patent
 [NASA-CASE-XHQ-03673] c33 N71-29046
 Thermally cascaded thermoelectric generator
 [NASA-CASE-NFO-1C753] c03 N72-26031
 Phototransistor imaging system
 [NASA-CASE-MFS-20809] c23 N73-13660
 Demodulator for carrier transducers
 [NASA-CASE-NUC-10107-1] c33 N74-17930
 Heat transfer device
 [NASA-CASE-NFO-11120-1] c34 N74-18552
 Amplitude steered array
 [NASA-CASE-GSC-11446-1] c33 N74-20860
 Glass-to-metal seals comprising relatively high
 expansion metals
 [NASA-CASE-LFW-1C698-1] c37 N74-21063
 Millimeter wave pumped parametric amplifier
 [NASA-CASE-GSC-11617-1] c33 N74-32660
 Magnifying image intensifier
 [NASA-CASE-GSC-12010-1] c33 N76-23482
 Method of forming a wick for a heat pipe
 [NASA-CASE-NFO-13391-1] c34 N76-27515
 WESTON INSTRUMENTS, INC., COLLIER PARK, MD.
 Electronically resettable fuse Patent
 [NASA-CASE-XGS-11177] c09 N71-27001
 WHIRLPOOL CORP., ST. JOSEPH, MICH.
 Relief container
 [NASA-CASE-XMS-06761] c05 N69-23192
 Fluid sample collector Patent
 [NASA-CASE-XMS-06767-1] c14 N71-20435
 WHITTAKER CORP., LOS ANGELES, CALIF.
 Polyurethanes of fluorine containing
 polycarbonates
 [NASA-CASE-MFS-10512] c06 N73-30099
 Polyurethanes from fluorocalkyl propyleneglycol
 polyethers
 [NASA-CASE-MFS-10506] c06 N73-30100
 Fluorohydroxy ethers
 [NASA-CASE-MFS-10507] c06 N73-30101
 Highly fluorinated polymers
 [NASA-CASE-MFS-11492] c06 N73-30102
 Fluorine containing polyurethane
 [NASA-CASE-MFS-10509] c06 N73-30103
 WHITTAKER CORP., SAN DIEGO, CALIF.
 Reinforced polyquinoxaline gasket and method of
 preparing the same
 [NASA-CASE-MFS-21364-1] c37 N74-18126
 WISCONSIN UNIV., MADISON.
 Coaxial anode wire for gas radiation counters
 [NASA-CASE-GSC-11492-1] c35 N74-26949
 Method and system for in vivo measurement of
 bone tissue using a two level energy source
 [NASA-CASE-MSC-14276-1] c52 N77-14737

Y

YOUNGSTOWN STATE UNIV., OHIO.
 Instrumentation for measurement of aircraft
 noise and sonic boom
 [NASA-CASE-LAR-11173-1] c35 N75-19614

Section 2

Typical Number Index Listing



Listings in this index are arranged alphanumerically by patent number. The subject category number indicates the category in Section 1 (Abstracts) in which the citation is located. The NASA accession number denotes the number by which the citation is identified within the subject category.

JPL-CASE-13687 c35 N76-14433
JPL-CASE-13756 c35 N76-14434

NASA-CASE-ARC-10003-1 c09 N71-25866
NASA-CASE-ARC-10009-1 c15 N71-17822
NASA-CASE-ARC-10017-1 c14 N72-29464
NASA-CASE-ARC-10020 c10 N72-17172
NASA-CASE-ARC-10030 c09 N71-12521
NASA-CASE-ARC-10042-2 c10 N72-11256
NASA-CASE-ARC-10043-1 c05 N71-11193
NASA-CASE-ARC-10050 c03 N71-33409
NASA-CASE-ARC-10097-2 c07 N73-25160
NASA-CASE-ARC-10098-1 c06 N71-24739
NASA-CASE-ARC-10099-1 c18 N71-15469
NASA-CASE-ARC-10100-1 c05 N71-24738
NASA-CASE-ARC-10101-1 c09 N71-33109
NASA-CASE-ARC-10105 c09 N72-17153
NASA-CASE-ARC-10106-1 c28 N72-22769
NASA-CASE-ARC-10131-1 c15 N71-27754
NASA-CASE-ARC-10132-1 c09 N71-24597
NASA-CASE-ARC-10134 c30 N72-17873
NASA-CASE-ARC-10136-1 c09 N72-22202
NASA-CASE-ARC-10137-1 c09 N71-28468
NASA-CASE-ARC-10138-1 c14 N72-24477
NASA-CASE-ARC-10140-1 c15 N71-17653
NASA-CASE-ARC-10153 c05 N71-28619
NASA-CASE-ARC-10154-1 c14 N72-22440
NASA-CASE-ARC-10160-1 c23 N72-27728
NASA-CASE-ARC-10176-1 c15 N72-21464
NASA-CASE-ARC-10178-1 c09 N72-17152
NASA-CASE-ARC-10179-1 c21 N72-22619
NASA-CASE-ARC-10180-1 c27 N74-12814
NASA-CASE-ARC-10192 c09 N72-21245
NASA-CASE-ARC-10194-1 c23 N73-20741
NASA-CASE-ARC-10196-1 c18 N73-13562
NASA-CASE-ARC-10197-1 c33 N74-17929
NASA-CASE-ARC-10263-1 c14 N72-22438
NASA-CASE-ARC-10264-1 c09 N73-20231
NASA-CASE-ARC-10265-1 c10 N72-28240
NASA-CASE-ARC-10266-1 c33 N75-29318
NASA-CASE-ARC-10269-1 c10 N72-16172
NASA-CASE-ARC-10275-1 c05 N72-22092
NASA-CASE-ARC-10278-1 c14 N73-25463
NASA-CASE-ARC-10302-1 c51 N74-15778
NASA-CASE-ARC-10304-1 c18 N73-26572
NASA-CASE-ARC-10304-2 c27 N74-27037
NASA-CASE-ARC-10308-1 c06 N72-31141
NASA-CASE-ARC-10222-1 c35 N76-18403
NASA-CASE-ARC-10325 c06 N72-25147
NASA-CASE-ARC-10329-1 c05 N73-26072
NASA-CASE-ARC-10329-2 c52 N76-30793
NASA-CASE-ARC-10330-1 c09 N73-32112
NASA-CASE-ARC-10344-1 c14 N72-21433
NASA-CASE-ARC-10344-2 c35 N75-26334
NASA-CASE-ARC-10345-1 c15 N73-12488
NASA-CASE-ARC-10348-1 c33 N75-19518
NASA-CASE-ARC-10362-1 c14 N73-32326

NASA-CASE-ARC-10364-2 c33 N75-25041
NASA-CASE-ARC-10364-2 (B) c33 N74-14941
NASA-CASE-ARC-10364-3 c33 N75-19520
NASA-CASE-ARC-10370-1 c36 N75-31426
NASA-CASE-ARC-10441-1 c35 N74-15126
NASA-CASE-ARC-10442-1 c35 N74-15093
NASA-CASE-ARC-10443-1 c14 N73-20477
NASA-CASE-ARC-10444-1 c16 N73-33397
NASA-CASE-ARC-10445-1 c31 N76-31365
NASA-CASE-ARC-10447-1 c52 N74-22771
NASA-CASE-ARC-10448-2 c74 N75-12732
NASA-CASE-ARC-10448-3 c35 N77-14408
NASA-CASE-ARC-10456-1 c05 N75-12930
NASA-CASE-ARC-10461-1 c44 N74-33379
NASA-CASE-ARC-10462-1 c37 N74-27901
NASA-CASE-ARC-10463-1 c09 N73-32111
NASA-CASE-ARC-10464-1 c27 N74-12812
NASA-CASE-ARC-10466-1 c60 N75-13539
NASA-CASE-ARC-10467-1 c09 N73-14214
NASA-CASE-ARC-10468-1 c14 N73-33361
NASA-CASE-ARC-10469-1 c25 N75-12086
NASA-CASE-ARC-10470-1 c02 N73-26005
NASA-CASE-ARC-10470-3 c05 N76-29217
NASA-CASE-ARC-10516-1 c70 N74-21300
NASA-CASE-ARC-10519-2 c05 N75-25915
NASA-CASE-ARC-10583-1 c52 N76-29894
NASA-CASE-ARC-10592-1 c27 N74-21156
NASA-CASE-ARC-10592-2 c27 N76-42315
NASA-CASE-ARC-10593-1 c33 N74-27682
NASA-CASE-ARC-10596-1 c33 N74-21851
NASA-CASE-ARC-10597-1 c52 N74-20726
NASA-CASE-ARC-10598-1 c75 N74-30156
NASA-CASE-ARC-10599-1 c05 N73-26071
NASA-CASE-ARC-10631-1 c74 N76-20958
NASA-CASE-ARC-10633-1 c25 N74-26947
NASA-CASE-ARC-10637-1 c35 N75-16783
NASA-CASE-ARC-10639-1 c35 N77-19388
NASA-CASE-ARC-10642-1 c36 N76-14447
NASA-CASE-ARC-10643-1 c25 N75-12087
NASA-CASE-ARC-10643-2 c51 N75-13506
NASA-CASE-ARC-10710-1 c09 N75-12969
NASA-CASE-ARC-10711-2 c33 N76-21390
NASA-CASE-ARC-10712-1 c07 N74-33218
NASA-CASE-ARC-10714-1 c27 N76-15310
NASA-CASE-ARC-10716-1 c35 N77-20399
NASA-CASE-ARC-10721-1 c27 N76-22376
NASA-CASE-ARC-10722-1 c51 N75-25503
NASA-CASE-ARC-10749-1 c23 N73-32542
NASA-CASE-ARC-10753-1 c54 N75-27760
NASA-CASE-ARC-10754-1 c07 N75-24736
NASA-CASE-ARC-10755-2 c34 N76-27517
NASA-CASE-ARC-10756-1 c54 N77-32721
NASA-CASE-ARC-10760-1 c25 N76-22323
NASA-CASE-ARC-10761-1 c07 N77-18154
NASA-CASE-ARC-10802-1 c35 N75-30502
NASA-CASE-ARC-10806 c06 N74-27872
NASA-CASE-ARC-10806-1 c35 N75-29381
NASA-CASE-ARC-10807-1 c05 N77-17029
NASA-CASE-ARC-10808-1 c09 N76-24280
NASA-CASE-ARC-10810-1 c33 N76-19339
NASA-CASE-ARC-10812-1 c07 N76-18131
NASA-CASE-ARC-10813-1 c27 N76-16230
NASA-CASE-ARC-10814-2 c25 N77-31260
NASA-CASE-ARC-10816-1 c35 N76-24525
NASA-CASE-ARC-10820-1 c54 N77-32766
NASA-CASE-ARC-10849-1 c17 N76-29347
NASA-CASE-ARC-10855-1 c52 N77-10780
NASA-CASE-ARC-10892-2 c27 N77-17245
NASA-CASE-ARC-10896-1 c34 N75-32389
NASA-CASE-ARC-10897-1 c33 N77-31404
NASA-CASE-ARC-10898-1 c35 N77-18417
NASA-CASE-ARC-10899-1 c60 N77-19760
NASA-CASE-ARC-10900-1 c35 N77-24454
NASA-CASE-ARC-10903-1 c09 N76-10148
NASA-CASE-ARC-10905-1 c37 N77-13418
NASA-CASE-ARC-10907-1 c37 N75-32465
NASA-CASE-ARC-10911-1 c35 N77-20400
NASA-CASE-ARC-10912-1 c34 N77-19353
NASA-CASE-ARC-10913-1 c24 N76-26286
NASA-CASE-ARC-10915-2 c27 N77-20256

NUMBER

NUMBER INDEX

NASA-CASE-ARC-10915-3	c24	N77-24200	NASA-CASE-ERC-10224	c09	N72-25261
NASA-CASE-ARC-10916-1	c54	N76-26871	NASA-CASE-ERC-10224-2	c09	N73-27150
NASA-CASE-ARC-10917-1	c37	N76-20485	NASA-CASE-ERC-10226-1	c14	N73-16483
NASA-CASE-ARC-10932-1	c74	N76-22993	NASA-CASE-ERC-10248	c14	N72-17323
NASA-CASE-ARC-10970-1	c36	N77-25501	NASA-CASE-ERC-10267	c09	N72-23173
NASA-CASE-ARC-10971-1	c09	N76-26224	NASA-CASE-ERC-10268	c09	N72-25252
NASA-CASE-ARC-10974-1	c34	N77-27345	NASA-CASE-ERC-10275	c26	N72-25680
NASA-CASE-ARC-10975-1	c54	N77-24771	NASA-CASE-ERC-10276	c14	N73-26432
NASA-CASE-ARC-10976-1	c74	N77-22950	NASA-CASE-ERC-10283	c16	N72-25485
NASA-CASE-ARC-10979-1	c09	N77-19076	NASA-CASE-ERC-10285	c10	N73-16206
NASA-CASE-ARC-10980-1	c27	N77-18265	NASA-CASE-ERC-10292	c14	N72-25410
NASA-CASE-ARC-10981-1	c35	N77-10498	NASA-CASE-ERC-10307	c08	N72-21198
NASA-CASE-ARC-10984-1	c32	N77-24328	NASA-CASE-ERC-10324	c07	N72-25173
NASA-CASE-ARC-10985-1	c52	N77-17701	NASA-CASE-ERC-10325	c15	N72-25457
NASA-CASE-ARC-10990-1	c04	N77-12031	NASA-CASE-ERC-10338	c04	N72-31072
NASA-CASE-ARC-10991-1	c25	N77-12157	NASA-CASE-ERC-10339-1	c18	N73-30532
NASA-CASE-ARC-10992-1	c25	N77-17178	NASA-CASE-ERC-10350	c14	N73-20474
NASA-CASE-ARC-10994-1	c52	N76-33835	NASA-CASE-ERC-10363	c18	N72-25541
NASA-CASE-ARC-10994-2	c52	N77-15619	NASA-CASE-ERC-10364	c18	N72-25540
NASA-CASE-ARC-11007-1	c52	N77-14736	NASA-CASE-ERC-10365-1	c31	N73-32749
NASA-CASE-ARC-11008-1	c27	N76-28421	NASA-CASE-ERC-10392	c21	N73-14692
NASA-CASE-ARC-11035-1	c52	N77-15621	NASA-CASE-ERC-10403-1	c10	N73-26228
NASA-CASE-ARC-11036-1	c35	N77-11364	NASA-CASE-ERC-10412-1	c09	N73-12211
NASA-CASE-ARC-11040-1	c24	N77-19173	NASA-CASE-ERC-10419	c21	N72-21631
NASA-CASE-ARC-11042-1	c24	N77-11119	NASA-CASE-ERC-10419-1	c03	N75-30132
NASA-CASE-ARC-11043-1	c34	N77-14372	NASA-CASE-ERC-10439	c02	N73-19004
NASA-CASE-ARC-11045-1	c05	N77-28111	NASA-CASE-ERC-10552	c09	N71-12539
NASA-CASE-ARC-11046-1	c35	N76-28535	NASA-CASE-ERC-11020	c14	N71-26774
NASA-CASE-ARC-11051-1	c27	N77-10201			
NASA-CASE-ARC-11052-1	c54	N77-30751	NASA-CASE-PRC-10005	c15	N71-26145
NASA-CASE-ARC-11053-1	c25	N77-29252	NASA-CASE-PRC-10010	c10	N71-24862
NASA-CASE-ARC-11057-1	c27	N77-26308	NASA-CASE-PRC-10012	c14	N72-17329
NASA-CASE-ARC-11058-1	c54	N77-15641	NASA-CASE-PRC-10019	c15	N73-12487
NASA-CASE-ARC-11059-1	c54	N77-14743	NASA-CASE-PRC-10022	c12	N71-26546
NASA-CASE-ARC-11100-1	c54	N77-25784	NASA-CASE-PRC-10029	c09	N71-24618
NASA-CASE-ARC-11101-1	c54	N77-14742	NASA-CASE-PRC-10029-2	c05	N72-25121
NASA-CASE-ARC-11106-1	c05	N77-31130	NASA-CASE-PRC-10036	c09	N72-22200
NASA-CASE-ARC-11120-1	c52	N77-23743	NASA-CASE-PRC-10038	c15	N72-20444
			NASA-CASE-PRC-10049-1	c04	N74-13420
NASA-CASE-ERC-10001	c23	N71-24868	NASA-CASE-PRC-10051-1	c35	N74-13129
NASA-CASE-ERC-10011	c07	N71-29065	NASA-CASE-PRC-10060-1	c14	N73-27379
NASA-CASE-ERC-10013	c09	N71-26678	NASA-CASE-PRC-10063	c01	N71-12217
NASA-CASE-ERC-10014	c14	N71-28863	NASA-CASE-PRC-10071-1	c32	N74-20813
NASA-CASE-ERC-10015-2	c10	N72-27246	NASA-CASE-PRC-10072-1	c33	N74-14939
NASA-CASE-ERC-10017	c16	N71-15567	NASA-CASE-PRC-10081-1	c37	N77-14477
NASA-CASE-ERC-10019	c16	N71-15551	NASA-CASE-PRC-10090-1	c33	N77-11296
NASA-CASE-ERC-10020	c16	N71-26154	NASA-CASE-PRC-10092-1	c05	N77-31135
NASA-CASE-ERC-10022	c15	N71-26635			
NASA-CASE-ERC-10031	c12	N71-18603	NASA-CASE-GSC-10007	c18	N71-16046
NASA-CASE-ERC-10032	c10	N71-25900	NASA-CASE-GSC-10021-1	c09	N71-24595
NASA-CASE-ERC-10033	c14	N71-26672	NASA-CASE-GSC-10022-1	c10	N71-25882
NASA-CASE-ERC-10034	c15	N71-24896	NASA-CASE-GSC-10041-1	c10	N71-19418
NASA-CASE-ERC-10041	c08	N71-29138	NASA-CASE-GSC-10062	c14	N71-15605
NASA-CASE-ERC-10044-1	c14	N71-27090	NASA-CASE-GSC-10064-1	c10	N72-22235
NASA-CASE-ERC-10045	c15	N71-24910	NASA-CASE-GSC-10065-1	c10	N71-27136
NASA-CASE-ERC-10046	c10	N71-18722	NASA-CASE-GSC-10072	c18	N71-14014
NASA-CASE-ERC-10048	c09	N72-25251	NASA-CASE-GSC-10082-1	c10	N72-20221
NASA-CASE-ERC-10065	c09	N71-27364	NASA-CASE-GSC-10083-1	c30	N71-16090
NASA-CASE-ERC-10072	c09	N70-11148	NASA-CASE-GSC-10067-1	c02	N71-19287
NASA-CASE-ERC-10073-1	c24	N74-19769	NASA-CASE-GSC-10087-2	c21	N71-13958
NASA-CASE-ERC-10075	c09	N71-24800	NASA-CASE-GSC-10087-3	c07	N72-12080
NASA-CASE-ERC-10075-2	c09	N72-22196	NASA-CASE-GSC-10087-4	c07	N73-20174
NASA-CASE-ERC-10081	c14	N72-28437	NASA-CASE-GSC-10097-1	c08	N71-27210
NASA-CASE-ERC-10087	c14	N71-27334	NASA-CASE-GSC-10114-1	c10	N71-27366
NASA-CASE-ERC-10087-2	c14	N72-31446	NASA-CASE-GSC-10118-1	c07	N71-24621
NASA-CASE-ERC-10088	c26	N71-25490	NASA-CASE-GSC-10131-1	c07	N71-24624
NASA-CASE-ERC-10089	c23	N72-17747	NASA-CASE-GSC-10185-1	c07	N72-12081
NASA-CASE-ERC-10090	c21	N71-24948	NASA-CASE-GSC-10186	c08	N71-33110
NASA-CASE-ERC-10097	c15	N71-28465	NASA-CASE-GSC-10188-1	c23	N71-24725
NASA-CASE-ERC-10098	c09	N71-28618	NASA-CASE-GSC-10216-1	c23	N71-26722
NASA-CASE-ERC-10100	c09	N71-33519	NASA-CASE-GSC-10218-1	c15	N72-21465
NASA-CASE-ERC-10108	c06	N72-21094	NASA-CASE-GSC-10220-1	c07	N71-27433
NASA-CASE-ERC-10112	c07	N72-21119	NASA-CASE-GSC-10221-1	c09	N72-23171
NASA-CASE-ERC-10113	c09	N71-27053	NASA-CASE-GSC-10225-1	c06	N73-27086
NASA-CASE-ERC-10119	c26	N72-21701	NASA-CASE-GSC-10299-1	c09	N71-24804
NASA-CASE-ERC-10120	c26	N69-33482	NASA-CASE-GSC-10303	c15	N72-22480
NASA-CASE-ERC-10125	c09	N71-24893	NASA-CASE-GSC-10306-1	c15	N71-24694
NASA-CASE-ERC-10138	c26	N71-14354	NASA-CASE-GSC-10344-1	c03	N72-27053
NASA-CASE-ERC-10139	c09	N72-17154	NASA-CASE-GSC-10361-1	c18	N72-23581
NASA-CASE-ERC-10150	c14	N71-28992	NASA-CASE-GSC-10366-1	c10	N71-18772
NASA-CASE-ERC-10151	c16	N71-29131	NASA-CASE-GSC-10373-1	c07	N71-19773
NASA-CASE-ERC-10174	c14	N72-25409	NASA-CASE-GSC-10376-1	c14	N71-27407
NASA-CASE-ERC-10178	c16	N71-24832	NASA-CASE-GSC-10390-1	c07	N72-11149
NASA-CASE-ERC-10179	c07	N72-20141	NASA-CASE-GSC-10413	c10	N71-26531
NASA-CASE-ERC-10180-1	c60	N74-20836	NASA-CASE-GSC-10441-1	c14	N71-27425
NASA-CASE-ERC-10187	c16	N69-31343	NASA-CASE-GSC-10452	c07	N71-12396
NASA-CASE-ERC-10208	c15	N70-10867	NASA-CASE-GSC-10487-1	c03	N71-24719
NASA-CASE-ERC-10214	c09	N72-31235	NASA-CASE-GSC-10503-1	c14	N72-20381
NASA-CASE-ERC-10222	c09	N72-22199	NASA-CASE-GSC-10514-1	c14	N72-20379

NUMBER INDEX

NASA-CASE-GSC-10518-1	c15	N72-22489	NASA-CASE-GSC-11514-1	c03	N72-24037
NASA-CASE-GSC-10553-1	c07	N71-19854	NASA-CASE-GSC-11531-1	c52	N74-27566
NASA-CASE-GSC-10554-1	c08	N71-29033	NASA-CASE-GSC-11533-1	c14	N73-13435
NASA-CASE-GSC-10555-1	c21	N71-27324	NASA-CASE-GSC-11551-1	c37	N76-18459
NASA-CASE-GSC-10556-1	c31	N71-26537	NASA-CASE-GSC-11553-1	c35	N74-15831
NASA-CASE-GSC-10557-1	c31	N71-26537	NASA-CASE-GSC-11560-1	c33	N74-20861
NASA-CASE-GSC-10564	c10	N71-29135	NASA-CASE-GSC-11569-1	c89	N74-30886
NASA-CASE-GSC-10565-1	c06	N72-25149	NASA-CASE-GSC-11571-1	c36	N77-25499
NASA-CASE-GSC-10566-1	c15	N72-18477	NASA-CASE-GSC-11577-1	c37	N75-15992
NASA-CASE-GSC-10590-1	c31	N73-14853	NASA-CASE-GSC-11577-3	c24	N76-19234
NASA-CASE-GSC-10607-1	c15	N72-20442	NASA-CASE-GSC-11582-1	c33	N75-19517
NASA-CASE-GSC-10614-1	c09	N72-11224	NASA-CASE-GSC-11600-1	c35	N74-21019
NASA-CASE-GSC-10640-1	c28	N72-18766	NASA-CASE-GSC-11602-1	c33	N74-21850
NASA-CASE-GSC-10656-1	c09	N72-25249	NASA-CASE-GSC-11617-1	c33	N74-32660
NASA-CASE-GSC-10667-1	c10	N71-33129	NASA-CASE-GSC-11619-1	c34	N75-12222
NASA-CASE-GSC-10668-1	c07	N71-28430	NASA-CASE-GSC-11620-1	c34	N74-23039
NASA-CASE-GSC-10669-1	c03	N72-20031	NASA-CASE-GSC-11623-1	c33	N75-25040
NASA-CASE-GSC-10695-1	c09	N72-25259	NASA-CASE-GSC-11690-1	c14	N73-28499
NASA-CASE-GSC-10700	c23	N71-30027	NASA-CASE-GSC-11743-1	c32	N75-24981
NASA-CASE-GSC-10709-1	c28	N71-25213	NASA-CASE-GSC-11744-1	c33	N75-26243
NASA-CASE-GSC-10710-1	c28	N71-27094	NASA-CASE-GSC-11746-1	c36	N75-19654
NASA-CASE-GSC-10735-1	c10	N71-26085	NASA-CASE-GSC-11752-1	c77	N75-20140
NASA-CASE-GSC-10780-1	c14	N72-16283	NASA-CASE-GSC-11760-1	c33	N75-19516
NASA-CASE-GSC-10786-1	c10	N72-28241	NASA-CASE-GSC-11782-1	c74	N76-30053
NASA-CASE-GSC-10791-1	c15	N73-14469	NASA-CASE-GSC-11783-1	c33	N75-19516
NASA-CASE-GSC-10814-1	c03	N73-20039	NASA-CASE-GSC-11786-1	c24	N76-24363
NASA-CASE-GSC-10835-1	c09	N72-33205	NASA-CASE-GSC-11789-1	c33	N77-14333
NASA-CASE-GSC-10878-1	c10	N72-22236	NASA-CASE-GSC-11824-1	c33	N77-26386
NASA-CASE-GSC-10879-1	c14	N72-25413	NASA-CASE-GSC-11829-1	c35	N75-27331
NASA-CASE-GSC-10880-1	c08	N72-11172	NASA-CASE-GSC-11839-1	c60	N77-14751
NASA-CASE-GSC-10880-1	c21	N73-30640	NASA-CASE-GSC-11839-2	c60	N76-18803
NASA-CASE-GSC-10891-1	c10	N71-26626	NASA-CASE-GSC-11839-3	c60	N77-32731
NASA-CASE-GSC-10903-1	c14	N73-12444	NASA-CASE-GSC-11844-1	c33	N75-19522
NASA-CASE-GSC-10913	c15	N72-22491	NASA-CASE-GSC-11849-1	c33	N76-16332
NASA-CASE-GSC-10945-1	c21	N72-31637	NASA-CASE-GSC-11862-1	c32	N76-18295
NASA-CASE-GSC-10949-1	c07	N71-28965	NASA-CASE-GSC-11868-1	c17	N76-22245
NASA-CASE-GSC-10975-1	c08	N73-13187	NASA-CASE-GSC-11877-1	c74	N76-18913
NASA-CASE-GSC-10984-1	c37	N75-26371	NASA-CASE-GSC-11883-1	c37	N77-19458
NASA-CASE-GSC-10990-1	c09	N73-26195	NASA-CASE-GSC-11883-2	c37	N77-15400
NASA-CASE-GSC-11013-1	c09	N73-19234	NASA-CASE-GSC-11889-1	c35	N76-16393
NASA-CASE-GSC-11018-1	c31	N73-30829	NASA-CASE-GSC-11892-1	c35	N76-15433
NASA-CASE-GSC-11046-1	c07	N73-28013	NASA-CASE-GSC-11893-1	c35	N76-31489
NASA-CASE-GSC-11063-1	c37	N77-27400	NASA-CASE-GSC-11895-1	c35	N76-15436
NASA-CASE-GSC-11074-1	c14	N73-28489	NASA-CASE-GSC-11898-1	c32	N77-30309
NASA-CASE-GSC-11077-1	c02	N73-13008	NASA-CASE-GSC-11902-1	c38	N77-17495
NASA-CASE-GSC-11079-1	c37	N75-18574	NASA-CASE-GSC-11909	c32	N74-20863
NASA-CASE-GSC-11092-2	c04	N73-27052	NASA-CASE-GSC-11917-2	c51	N76-29891
NASA-CASE-GSC-11095-1	c14	N72-10375	NASA-CASE-GSC-11924-1	c33	N76-27472
NASA-CASE-GSC-11126-1	c09	N72-25253	NASA-CASE-GSC-11925-1	c33	N76-18353
NASA-CASE-GSC-11127-1	c09	N75-24758	NASA-CASE-GSC-11956-1	c35	N75-25134
NASA-CASE-GSC-11133-1	c23	N72-11568	NASA-CASE-GSC-11960-1	c37	N77-14479
NASA-CASE-GSC-11139	c09	N71-27016	NASA-CASE-GSC-11963-1	c33	N77-10429
NASA-CASE-GSC-11149-1	c15	N73-30457	NASA-CASE-GSC-11968-1	c32	N76-15329
NASA-CASE-GSC-11163-1	c15	N73-32360	NASA-CASE-GSC-11974-1	c37	N77-19458
NASA-CASE-GSC-11169-2	c05	N73-32011	NASA-CASE-GSC-11975-1	c37	N77-19458
NASA-CASE-GSC-11182-1	c15	N75-13007	NASA-CASE-GSC-11976-1	c43	N76-23671
NASA-CASE-GSC-11188-1	c14	N73-32320	NASA-CASE-GSC-11978-1	c37	N77-17464
NASA-CASE-GSC-11188-2	c21	N73-19630	NASA-CASE-GSC-11989-1	c74	N77-28932
NASA-CASE-GSC-11188-3	c74	N74-20008	NASA-CASE-GSC-11998-1	c34	N77-32413
NASA-CASE-GSC-11205-1	c15	N73-25513	NASA-CASE-GSC-12010-1	c33	N76-23482
NASA-CASE-GSC-11211-1	c03	N72-25020	NASA-CASE-GSC-12017-1	c32	N77-30308
NASA-CASE-GSC-11214-1	c06	N73-13128	NASA-CASE-GSC-12018-1	c33	N77-14334
NASA-CASE-GSC-11215-1	c09	N73-28083	NASA-CASE-GSC-12022-1	c44	N76-28635
NASA-CASE-GSC-11222-1	c16	N73-32391	NASA-CASE-GSC-12022-2	c44	N76-26695
NASA-CASE-GSC-11239-1	c10	N73-25241	NASA-CASE-GSC-12023-1	c44	N76-28635
NASA-CASE-GSC-11262-1	c36	N74-21091	NASA-CASE-GSC-12030-1	c44	N76-30652
NASA-CASE-GSC-11291-1	c25	N72-33696	NASA-CASE-GSC-12032-2	c35	N76-19408
NASA-CASE-GSC-11296-1	c23	N73-30666	NASA-CASE-GSC-12039-1	c51	N77-22794
NASA-CASE-GSC-11302-1	c14	N73-13416	NASA-CASE-GSC-12044-1	c60	N76-13781
NASA-CASE-GSC-11304-1	c06	N72-21105	NASA-CASE-GSC-12045-1	c52	N77-18733
NASA-CASE-GSC-11340-1	c10	N72-33230	NASA-CASE-GSC-12046-1	c52	N77-26797
NASA-CASE-GSC-11353-2	c74	N74-21304	NASA-CASE-GSC-12053-1	c32	N77-28346
NASA-CASE-GSC-11358-1	c06	N73-26100	NASA-CASE-GSC-12058-1	c74	N77-26942
NASA-CASE-GSC-11367	c10	N71-26374	NASA-CASE-GSC-12059-1	c35	N77-27366
NASA-CASE-GSC-11367-1	c44	N74-19692	NASA-CASE-GSC-12075-1	c32	N77-31350
NASA-CASE-GSC-11368-1	c09	N73-32108	NASA-CASE-GSC-12077-1	c35	N77-24455
NASA-CASE-GSC-11388-1	c07	N73-24187	NASA-CASE-GSC-12081-2	c52	N77-26796
NASA-CASE-GSC-11394-1	c09	N73-32109	NASA-CASE-GSC-12082-1	c54	N76-22914
NASA-CASE-GSC-11425-1	c76	N74-20329	NASA-CASE-GSC-12082-2	c52	N77-27694
NASA-CASE-GSC-11425-2	c76	N75-25730	NASA-CASE-GSC-12083-1	c36	N76-15451
NASA-CASE-GSC-11428-1	c32	N74-20864	NASA-CASE-GSC-12088-1	c35	N76-17369
NASA-CASE-GSC-11434-1	c34	N74-27859	NASA-CASE-GSC-12110-1	c27	N77-32308
NASA-CASE-GSC-11444-1	c14	N73-28490	NASA-CASE-GSC-12111-2	c60	N77-31800
NASA-CASE-GSC-11445-1	c31	N74-27902	NASA-CASE-GSC-12115-1	c62	N76-31946
NASA-CASE-GSC-11446-1	c33	N74-20860	NASA-CASE-GSC-12137-1	c32	N77-27272
NASA-CASE-GSC-11479-1	c35	N74-28097	NASA-CASE-GSC-12138-1	c33	N77-20344
NASA-CASE-GSC-11487-1	c14	N73-30393	NASA-CASE-GSC-12142-1	c32	N77-20299
NASA-CASE-GSC-11492-1	c35	N74-26949	NASA-CASE-GSC-12143-1	c35	N77-32456
NASA-CASE-GSC-11513-1	c33	N74-20862	NASA-CASE-GSC-12145-1	c33	N77-19319

NUMBER INDEX

NASA-CASE-GSC-12146-1	c33	N77-21322	NASA-CASE-KSC-11035-1	c33	N77-20343
NASA-CASE-GSC-12147-1	c35	N77-20410	NASA-CASE-KSC-11047-1	c74	N77-15826
NASA-CASE-GSC-12148-1	c32	N77-22314			
NASA-CASE-GSC-12150-1	c32	N77-12247	NASA-CASE-LAR-02743	c14	N73-32324
NASA-CASE-GSC-12173-1	c52	N77-27693	NASA-CASE-LAR-10000	c14	N73-30394
NASA-CASE-GSC-12190-1	c33	N77-29403	NASA-CASE-LAR-10007-1	c05	N71-11195
NASA-CASE-GSC-12194-1	c20	N77-28219	NASA-CASE-LAR-10031	c15	N72-22484
NASA-CASE-GSC-12225-1	c74	N77-30935	NASA-CASE-LAR-10056	c05	N71-12351
NASA-CASE-GSC-12263-1	c35	N77-29471	NASA-CASE-LAR-10061-1	c15	N72-31483
			NASA-CASE-LAR-10073-1	c37	N76-24575
NASA-CASE-HQN-00936	c31	N71-29050	NASA-CASE-LAR-10076-1	c05	N73-20137
NASA-CASE-HQN-00937	c07	N71-28979	NASA-CASE-LAR-10083-1	c15	N71-27006
NASA-CASE-HQN-00938	c33	N71-29053	NASA-CASE-LAR-10089-1	c34	N74-23066
NASA-CASE-HQN-10037-1	c14	N73-27376	NASA-CASE-LAR-10098	c32	N71-26681
NASA-CASE-HQN-10069	c33	N75-27251	NASA-CASE-LAR-10102-1	c05	N72-23085
NASA-CASE-HQN-10364	c06	N71-27363	NASA-CASE-LAR-10105-1	c34	N74-15652
NASA-CASE-HQN-10439	c21	N72-21624	NASA-CASE-LAR-10106-1	c15	N71-27169
NASA-CASE-HQN-10462	c25	N75-29192	NASA-CASE-LAR-10121-1	c15	N71-26721
NASA-CASE-HQN-10541-1	c07	N71-26291	NASA-CASE-LAR-10128-1	c08	N73-20217
NASA-CASE-HQN-10541-2	c15	N71-27135	NASA-CASE-LAR-10129-1	c05	N73-25512
NASA-CASE-HQN-10541-3	c23	N72-23695	NASA-CASE-LAR-10129-2	c37	N74-20063
NASA-CASE-HQN-10541-4	c16	N71-27183	NASA-CASE-LAR-10137-1	c09	N72-22204
NASA-CASE-HQN-10542-1	c74	N75-25706	NASA-CASE-LAR-10163-1	c09	N72-25247
NASA-CASE-HQN-10638-1	c15	N73-30460	NASA-CASE-LAR-10168-1	c33	N74-22865
NASA-CASE-HQN-10654-1	c16	N73-13489	NASA-CASE-LAR-10170-1	c37	N74-11301
NASA-CASE-HQN-10703	c21	N73-13643	NASA-CASE-LAR-10173-1	c27	N71-14090
NASA-CASE-HQN-10740-1	c72	N74-19310	NASA-CASE-LAR-10176-1	c14	N72-20380
NASA-CASE-HQN-10756-1	c14	N72-25428	NASA-CASE-LAR-10180-1	c06	N71-13461
NASA-CASE-HQN-10780	c14	N71-30265	NASA-CASE-LAR-10184	c14	N72-22445
NASA-CASE-HQN-10781	c23	N71-30292	NASA-CASE-LAR-10193-1	c15	N71-27146
NASA-CASE-HQN-10790-1	c36	N74-11313	NASA-CASE-LAR-10194-1	c34	N74-30608
NASA-CASE-HQN-10792-1	c33	N74-11049	NASA-CASE-LAR-10195-1	c15	N73-19458
NASA-CASE-HQN-10832-1	c71	N74-21014	NASA-CASE-LAR-10203-1	c15	N72-16330
NASA-CASE-HQN-10841-1	c73	N75-22108	NASA-CASE-LAR-10204	c14	N71-27215
NASA-CASE-HQN-10844-1	c36	N75-19653	NASA-CASE-LAR-10208-1	c35	N76-18400
NASA-CASE-HQN-10862-1	c44	N76-29699	NASA-CASE-LAR-10218-1	c09	N70-34559
NASA-CASE-HQN-10876-1	c33	N76-27473	NASA-CASE-LAR-10226-1	c14	N73-19419
NASA-CASE-HQN-10880-1	c32	N75-30385	NASA-CASE-LAR-10241-1	c54	N74-14845
NASA-CASE-HQN-10888-1	c37	N77-22484	NASA-CASE-LAR-10249-1	c02	N71-26110
			NASA-CASE-LAR-10253-1	c09	N72-25258
NASA-CASE-KSC-10002	c10	N71-25865	NASA-CASE-LAR-10256-1	c85	N74-34672
NASA-CASE-KSC-10003	c10	N73-13235	NASA-CASE-LAR-10270-1	c32	N72-25877
NASA-CASE-KSC-10020	c10	N71-27338	NASA-CASE-LAR-10274-1	c14	N71-17626
NASA-CASE-KSC-10031	c15	N72-22486	NASA-CASE-LAR-10276-1	c09	N75-15662
NASA-CASE-KSC-10108	c14	N73-25461	NASA-CASE-LAR-10294-1	c26	N72-28762
NASA-CASE-KSC-10126	c11	N71-24985	NASA-CASE-LAR-10295-1	c35	N74-21062
NASA-CASE-KSC-10162	c09	N72-11225	NASA-CASE-LAR-10305	c14	N71-26137
NASA-CASE-KSC-10164	c07	N71-33108	NASA-CASE-LAR-10310-1	c10	N73-20253
NASA-CASE-KSC-10198	c11	N71-28629	NASA-CASE-LAR-10311-1	c16	N73-16536
NASA-CASE-KSC-10242	c15	N72-23497	NASA-CASE-LAR-10317-1	c32	N71-16103
NASA-CASE-KSC-10278	c05	N72-16015	NASA-CASE-LAR-10318-1	c31	N74-18089
NASA-CASE-KSC-10294	c14	N72-18411	NASA-CASE-LAR-10319-1	c14	N73-32322
NASA-CASE-KSC-10326	c08	N72-21197	NASA-CASE-LAR-10320-1	c09	N72-23172
NASA-CASE-KSC-10392	c07	N73-26117	NASA-CASE-LAR-10323-1	c12	N71-17573
NASA-CASE-KSC-10393	c09	N72-21247	NASA-CASE-LAR-10337-1	c24	N75-30260
NASA-CASE-KSC-10397	c08	N72-25206	NASA-CASE-LAR-10344-1	c35	N76-33470
NASA-CASE-KSC-10513	c15	N72-25453	NASA-CASE-LAR-10348-1	c11	N73-12264
NASA-CASE-KSC-10521	c07	N73-20176	NASA-CASE-LAR-10365-1	c05	N72-27102
NASA-CASE-KSC-10565	c09	N72-25250	NASA-CASE-LAR-10367-1	c03	N70-26817
NASA-CASE-KSC-10595	c08	N73-12176	NASA-CASE-LAR-10372	c09	N71-18599
NASA-CASE-KSC-10615	c15	N73-12486	NASA-CASE-LAR-10373-1	c18	N71-26155
NASA-CASE-KSC-10626	c14	N73-27378	NASA-CASE-LAR-10385-2	c70	N74-13436
NASA-CASE-KSC-10639	c15	N73-26472	NASA-CASE-LAR-10385-3	c23	N73-32538
NASA-CASE-KSC-10644	c09	N72-27227	NASA-CASE-LAR-10403	c21	N71-11766
NASA-CASE-KSC-10647-1	c10	N72-31273	NASA-CASE-LAR-10409-1	c31	N74-21059
NASA-CASE-KSC-10654-1	c07	N73-30115	NASA-CASE-LAR-10416-1	c24	N74-30001
NASA-CASE-KSC-10698	c07	N73-20175	NASA-CASE-LAR-10426-1	c09	N74-19528
NASA-CASE-KSC-10723-1	c37	N75-13265	NASA-CASE-LAR-10439-1	c33	N73-27796
NASA-CASE-KSC-10728-1	c14	N73-32319	NASA-CASE-LAR-10440-1	c14	N73-32323
NASA-CASE-KSC-10729-1	c09	N73-32110	NASA-CASE-LAR-10450-1	c37	N74-27905
NASA-CASE-KSC-10730-1	c14	N73-32318	NASA-CASE-LAR-10483-1	c14	N73-32327
NASA-CASE-KSC-10731-1	c33	N74-27862	NASA-CASE-LAR-10489-1	c31	N74-18124
NASA-CASE-KSC-10736-1	c33	N75-19521	NASA-CASE-LAR-10489-2	c31	N74-32920
NASA-CASE-KSC-10750-1	c35	N75-12270	NASA-CASE-LAR-10496-1	c14	N72-22437
NASA-CASE-KSC-10752-1	c15	N73-27407	NASA-CASE-LAR-10503-1	c09	N72-21248
NASA-CASE-KSC-10769-1	c33	N74-29556	NASA-CASE-LAR-10507-1	c11	N72-25284
NASA-CASE-KSC-10782-1	c33	N75-30431	NASA-CASE-LAR-10511-1	c09	N72-29172
NASA-CASE-KSC-10807-1	c33	N75-26246	NASA-CASE-LAR-10513-1	c07	N72-25170
NASA-CASE-KSC-10834-1	c33	N76-14371	NASA-CASE-LAR-10523-1	c14	N72-22444
NASA-CASE-KSC-10849-1	c52	N77-14738	NASA-CASE-LAR-10531-1	c02	N73-13023
NASA-CASE-KSC-10899-1	c33	N77-28394	NASA-CASE-LAR-10539-1	c17	N73-12547
NASA-CASE-KSC-11004-1	c54	N77-30749	NASA-CASE-LAR-10541-1	c15	N72-32487
NASA-CASE-KSC-11008-1	c33	N77-21321	NASA-CASE-LAR-10544-1	c37	N74-13178
NASA-CASE-KSC-11010-1	c44	N77-15493	NASA-CASE-LAR-10545-1	c09	N72-21244
NASA-CASE-KSC-11018-1	c33	N77-21320	NASA-CASE-LAR-10546-1	c11	N72-25287
NASA-CASE-KSC-11020-1	c27	N77-23267	NASA-CASE-LAR-10547-1	c31	N74-13177
NASA-CASE-KSC-11030-1	c52	N77-25772	NASA-CASE-LAR-10549-1	c31	N73-13898
NASA-CASE-KSC-11031-1	c33	N77-21319	NASA-CASE-LAR-10550-1	c09	N74-30597
NASA-CASE-KSC-11034-1	c44	N77-21666	NASA-CASE-LAR-10551-1	c25	N74-12813

NUMBER INDEX

NASA-CASE-LAR-10557	c02	N72-11018	NASA-CASE-LAR-11252-1	c05	N75-25914
NASA-CASE-LAR-10574-1	c11	N73-13257	NASA-CASE-LAR-11263-1	c35	N75-33369
NASA-CASE-LAR-10578-1	c12	N73-25262	NASA-CASE-LAR-11264-1	c33	N75-27261
NASA-CASE-LAR-10585-1	c02	N76-22154	NASA-CASE-LAR-11302-1	c25	N75-13054
NASA-CASE-LAR-10586-1	c19	N74-15089	NASA-CASE-LAR-11310-1	c07	N77-28178
NASA-CASE-LAR-10590-1	c15	N70-26819	NASA-CASE-LAR-11326-1	c35	N75-33368
NASA-CASE-LAR-10595-1	c35	N74-16135	NASA-CASE-LAR-11341-1	c36	N75-19655
NASA-CASE-LAR-10612-1	c12	N73-28144	NASA-CASE-LAR-11352-1	c33	N75-26245
NASA-CASE-LAR-10620-1	c09	N72-25255	NASA-CASE-LAR-11354-1	c35	N75-27330
NASA-CASE-LAR-10623-1	c14	N73-30395	NASA-CASE-LAR-11361-1	c44	N77-22607
NASA-CASE-LAR-10626-1	c19	N74-21015	NASA-CASE-LAR-11372-1	c27	N74-19772
NASA-CASE-LAR-10629-1	c35	N75-33367	NASA-CASE-LAR-11387-1	c04	N76-20114
NASA-CASE-LAR-10634-1	c37	N74-18123	NASA-CASE-LAR-11387-2	c04	N77-19056
NASA-CASE-LAR-10642-1	c07	N74-31270	NASA-CASE-LAR-11389-1	c33	N77-26387
NASA-CASE-LAR-10668-1	c06	N73-16106	NASA-CASE-LAR-11390-1	c32	N77-12167
NASA-CASE-LAR-10670-1	c06	N73-30097	NASA-CASE-LAR-11397-1	c27	N75-29263
NASA-CASE-LAR-10670-2	c15	N74-27360	NASA-CASE-LAR-11405-1	c45	N76-31714
NASA-CASE-LAR-10682-1	c02	N73-26004	NASA-CASE-LAR-11428-1	c35	N74-34857
NASA-CASE-LAR-10686	c14	N71-28935	NASA-CASE-LAR-11434-1	c35	N76-22509
NASA-CASE-LAR-10688-1	c37	N74-21056	NASA-CASE-LAR-11435-1	c35	N76-15432
NASA-CASE-LAR-10706-2	c05	N77-31132	NASA-CASE-LAR-11458-1	c35	N76-16392
NASA-CASE-LAR-10717-1	c21	N73-30641	NASA-CASE-LAR-11465-1	c37	N76-15554
NASA-CASE-LAR-10726-1	c14	N73-20475	NASA-CASE-LAR-11476-1	c07	N76-27232
NASA-CASE-LAR-10728-1	c14	N73-12445	NASA-CASE-LAR-11490-1	c35	N76-28530
NASA-CASE-LAR-10730-1	c33	N74-10223	NASA-CASE-LAR-11500-1	c35	N76-24523
NASA-CASE-LAR-10739-1	c14	N73-16484	NASA-CASE-LAR-11522-1	c34	N77-34881
NASA-CASE-LAR-10753-1	c08	N74-30421	NASA-CASE-LAR-11549-1	c37	N77-11397
NASA-CASE-LAR-10756-1	c32	N73-26910	NASA-CASE-LAR-11552-1	c35	N76-14429
NASA-CASE-LAR-10765-1	c32	N73-20740	NASA-CASE-LAR-11563-1	c37	N77-23482
NASA-CASE-LAR-10766-1	c14	N72-21432	NASA-CASE-LAR-11570-1	c34	N76-18364
NASA-CASE-LAR-10773-3	c51	N77-25769	NASA-CASE-LAR-11575-1	c02	N76-16014
NASA-CASE-LAR-10774	c10	N71-13545	NASA-CASE-LAR-11607-1	c32	N77-14292
NASA-CASE-LAR-10776-1	c02	N74-10034	NASA-CASE-LAR-11617-2	c35	N77-17430
NASA-CASE-LAR-10782-1	c31	N74-14133	NASA-CASE-LAR-11626-1	c34	N77-12332
NASA-CASE-LAR-10782-2	c31	N75-13111	NASA-CASE-LAR-11643-1	c37	N75-13268
NASA-CASE-LAR-10788-1	c31	N73-20880	NASA-CASE-LAR-11645-1	c02	N77-10001
NASA-CASE-LAR-10799-2	c34	N76-17317	NASA-CASE-LAR-11648-1	c35	N77-14407
NASA-CASE-LAR-10800-1	c33	N72-27959	NASA-CASE-LAR-11649-1	c51	N77-27677
NASA-CASE-LAR-10805-2	c34	N77-18382	NASA-CASE-LAR-11658-1	c37	N77-14478
NASA-CASE-LAR-10806-1	c35	N74-32877	NASA-CASE-LAR-11667-1	c52	N76-19785
NASA-CASE-LAR-10812-1	c09	N74-17955	NASA-CASE-LAR-11669-1	c34	N76-13419
NASA-CASE-LAR-10815-1	c16	N72-22520	NASA-CASE-LAR-11674-1	c07	N76-18117
NASA-CASE-LAR-10836-1	c26	N72-27784	NASA-CASE-LAR-11675-1	c45	N76-17656
NASA-CASE-LAR-10841-1	c31	N74-27900	NASA-CASE-LAR-11709-1	c37	N76-27567
NASA-CASE-LAR-10855-1	c14	N73-13415	NASA-CASE-LAR-11711-1	c74	N76-23985
NASA-CASE-LAR-10862-1	c35	N74-15092	NASA-CASE-LAR-11726-1	c37	N76-27568
NASA-CASE-LAR-10868-1	c33	N74-11050	NASA-CASE-LAR-11745-1	c32	N77-24339
NASA-CASE-LAR-10894-1	c18	N73-14584	NASA-CASE-LAR-11756-1	c24	N76-26284
NASA-CASE-LAR-10900-1	c37	N74-23064	NASA-CASE-LAR-11782-1	c74	N77-20882
NASA-CASE-LAR-10907-1	c35	N76-29551	NASA-CASE-LAR-11825-1	c35	N77-22449
NASA-CASE-LAR-10910-1	c35	N74-13132	NASA-CASE-LAR-11827-1	c32	N77-10392
NASA-CASE-LAR-10913	c14	N72-16282	NASA-CASE-LAR-11828-1	c23	N75-29181
NASA-CASE-LAR-10941-1	c37	N74-21057	NASA-CASE-LAR-11833-1	c06	N76-31129
NASA-CASE-LAR-10941-2	c15	N73-32371	NASA-CASE-LAR-11852-1	c05	N77-15027
NASA-CASE-LAR-10951-1	c28	N73-19819	NASA-CASE-LAR-11868-2	c08	N77-31176
NASA-CASE-LAR-10953-1	c17	N73-27446	NASA-CASE-LAR-11869-1	c35	N77-16497
NASA-CASE-LAR-10961-1	c15	N73-12496	NASA-CASE-LAR-11883-1	c09	N77-27131
NASA-CASE-LAR-10970-1	c33	N76-14372	NASA-CASE-LAR-11889-1	c19	N76-18227
NASA-CASE-LAR-10994-1	c24	N75-13032	NASA-CASE-LAR-11898-1	c24	N77-15103
NASA-CASE-LAR-11021-1	c32	N76-14321	NASA-CASE-LAR-11898-2	c24	N77-26242
NASA-CASE-LAR-11027-1	c35	N74-18088	NASA-CASE-LAR-11900-1	c05	N77-18134
NASA-CASE-LAR-11042-1	c33	N75-27252	NASA-CASE-LAR-11902-1	c27	N76-23436
NASA-CASE-LAR-11051-1	c15	N76-14158	NASA-CASE-LAR-11903-1	c07	N77-15036
NASA-CASE-LAR-11052-1	c32	N73-13929	NASA-CASE-LAR-11919-1	c07	N76-22202
NASA-CASE-LAR-11053-1	c25	N74-18551	NASA-CASE-LAR-11932-1	c05	N76-31219
NASA-CASE-LAR-11059-1	c76	N75-12810	NASA-CASE-LAR-11941-1	c06	N77-20098
NASA-CASE-LAR-11069-1	c35	N75-12272	NASA-CASE-LAR-11970-1	c08	N77-22147
NASA-CASE-LAR-11071-1	c35	N75-19611	NASA-CASE-LAR-11973-1	c43	N77-28563
NASA-CASE-LAR-11072-1	c15	N73-20535	NASA-CASE-LAR-11995-1	c28	N77-10213
NASA-CASE-LAR-11074-1	c51	N75-13502	NASA-CASE-LAR-12009-1	c44	N76-32649
NASA-CASE-LAR-11084-1	c09	N73-12216	NASA-CASE-LAR-12012-1	c36	N77-10517
NASA-CASE-LAR-11087-1	c02	N73-26008	NASA-CASE-LAR-12016-1	c32	N77-15236
NASA-CASE-LAR-11110-1	c34	N75-26282	NASA-CASE-LAR-12018-1	c20	N76-29365
NASA-CASE-LAR-11112-1	c32	N76-15330	NASA-CASE-LAR-12019-1	c24	N77-22179
NASA-CASE-LAR-11128	c12	N71-20436	NASA-CASE-LAR-12034-1	c02	N77-22045
NASA-CASE-LAR-11139-1	c35	N74-32878	NASA-CASE-LAR-12045-1	c34	N77-24423
NASA-CASE-LAR-11141-1	c07	N74-32418	NASA-CASE-LAR-12046-1	c45	N77-17609
NASA-CASE-LAR-11144-1	c25	N75-26043	NASA-CASE-LAR-12095-1	c39	N77-27432
NASA-CASE-LAR-11155-1	c35	N74-15091	NASA-CASE-LAR-12106-1	c35	N77-23441
NASA-CASE-LAR-11170-1	c32	N74-12843	NASA-CASE-LAR-12147-1	c27	N77-10198
NASA-CASE-LAR-11173-1	c35	N75-19614	NASA-CASE-LAR-12149-1	c54	N77-31787
NASA-CASE-LAR-11181-1	c39	N75-31479	NASA-CASE-LAR-12181-1	c27	N77-15192
NASA-CASE-LAR-11201-1	c35	N77-22452	NASA-CASE-LAR-12183-1	c36	N77-21424
NASA-CASE-LAR-11206-1	c74	N74-30118			
NASA-CASE-LAR-11207-1	c35	N75-19613	NASA-CASE-LBW-10106-1	c28	N71-26642
NASA-CASE-LAR-11211-1	c37	N75-12326	NASA-CASE-LBW-10155-1	c09	N71-29035
NASA-CASE-LAR-11213-1	c35	N75-15014	NASA-CASE-LBW-10199-1	c27	N74-23125
NASA-CASE-LAR-11224-1	c37	N76-18456	NASA-CASE-LBW-10210-1	c28	N71-26781
NASA-CASE-LAR-11237-1	c35	N75-19612	NASA-CASE-LBW-10219-1	c18	N71-28729

NUMBER INDEX

NASA-CASE-LEW-10233	c10	N71-27126	NASA-CASE-LEW-11484-2	c24	N75-14839
NASA-CASE-LEW-10250-1	c22	N71-28759	NASA-CASE-LEW-11496-1	c44	N77-14580
NASA-CASE-LEW-10278-1	c15	N71-28582	NASA-CASE-LEW-11531	c15	N71-14932
NASA-CASE-LEW-10281-1	c14	N72-17327	NASA-CASE-LEW-11549-1	c44	N77-19571
NASA-CASE-LEW-10286-1	c28	N71-28915	NASA-CASE-LEW-11569-1	c07	N74-15453
NASA-CASE-LEW-10326-3	c37	N74-10474	NASA-CASE-LEW-11573-1	c26	N77-28265
NASA-CASE-LEW-10327	c17	N71-33408	NASA-CASE-LEW-11581-1	c54	N75-13531
NASA-CASE-LEW-10330-1	c09	N72-27226	NASA-CASE-LEW-11583-1	c37	N74-13199
NASA-CASE-LEW-10345-1	c10	N71-25899	NASA-CASE-LEW-11593-1	c20	N76-14190
NASA-CASE-LEW-10359	c33	N72-25911	NASA-CASE-LEW-11617-1	c33	N74-10195
NASA-CASE-LEW-10359-2	c33	N73-25952	NASA-CASE-LEW-11632-2	c35	N75-13213
NASA-CASE-LEW-10364-1	c09	N71-13522	NASA-CASE-LEW-11645-2	c22	N73-28660
NASA-CASE-LEW-10374-1	c28	N73-13773	NASA-CASE-LEW-11646-1	c20	N74-31269
NASA-CASE-LEW-10387	c09	N72-22201	NASA-CASE-LEW-11669-1	c05	N73-27062
NASA-CASE-LEW-10393-1	c17	N71-15468	NASA-CASE-LEW-11672-1	c37	N74-27904
NASA-CASE-LEW-10424-2-2	c18	N72-25539	NASA-CASE-LEW-11676-1	c37	N76-22541
NASA-CASE-LEW-10433-1	c09	N72-22197	NASA-CASE-LEW-11694-1	c20	N75-18310
NASA-CASE-LEW-10436-1	c17	N73-32415	NASA-CASE-LEW-11694-2	c37	N76-14461
NASA-CASE-LEW-10450-1	c15	N72-25448	NASA-CASE-LEW-11696-1	c37	N75-13261
NASA-CASE-LEW-10489-1	c15	N72-25447	NASA-CASE-LEW-11696-2	c26	N75-19408
NASA-CASE-LEW-10518-1	c24	N72-33681	NASA-CASE-LEW-11726-1	c26	N73-27652
NASA-CASE-LEW-10518-2	c24	N72-28714	NASA-CASE-LEW-11855-1	c37	N76-20447
NASA-CASE-LEW-10518-3	c31	N74-10476	NASA-CASE-LEW-11860-1	c37	N76-18458
NASA-CASE-LEW-10533-1	c15	N73-28515	NASA-CASE-LEW-11866-1	c72	N76-15860
NASA-CASE-LEW-10533-2	c37	N74-11300	NASA-CASE-LEW-11873-1	c37	N77-27404
NASA-CASE-LEW-10689-1	c28	N71-26173	NASA-CASE-LEW-11876-1	c20	N76-21276
NASA-CASE-LEW-10698-1	c37	N74-21063	NASA-CASE-LEW-11877-1	c44	N76-28646
NASA-CASE-LEW-10770-1	c28	N72-22770	NASA-CASE-LEW-11881-1	c33	N77-17354
NASA-CASE-LEW-10794-1	c06	N72-17093	NASA-CASE-LEW-11915-1	c35	N76-14431
NASA-CASE-LEW-10805-1	c15	N73-13465	NASA-CASE-LEW-11925-1	c37	N75-31446
NASA-CASE-LEW-10805-2	c37	N74-13179	NASA-CASE-LEW-11930-1	c24	N76-22309
NASA-CASE-LEW-10805-3	c26	N74-10521	NASA-CASE-LEW-11930-2	c24	N76-26282
NASA-CASE-LEW-10814-1	c28	N70-35422	NASA-CASE-LEW-11930-3	c24	N77-32249
NASA-CASE-LEW-10835-1	c28	N72-22771	NASA-CASE-LEW-11938-1	c33	N76-15373
NASA-CASE-LEW-10856-1	c15	N72-22490	NASA-CASE-LEW-11949-1	c37	N76-29588
NASA-CASE-LEW-10874-1	c17	N72-22535	NASA-CASE-LEW-11978-1	c33	N77-26385
NASA-CASE-LEW-10906-1	c25	N74-30502	NASA-CASE-LEW-11981-1	c37	N76-20486
NASA-CASE-LEW-10920-1	c17	N73-24569	NASA-CASE-LEW-11981-2	c34	N77-32434
NASA-CASE-LEW-10950-1	c33	N74-27683	NASA-CASE-LEW-12013-1	c33	N77-17360
NASA-CASE-LEW-10965-1	c15	N72-25452	NASA-CASE-LEW-12038-2	c44	N77-32595
NASA-CASE-LEW-10981-1	c35	N74-21018	NASA-CASE-LEW-12039-1	c44	N76-23713
NASA-CASE-LEW-11005-1	c09	N72-21243	NASA-CASE-LEW-12048-1	c20	N77-20162
NASA-CASE-LEW-11015	c26	N73-32571	NASA-CASE-LEW-12050-1	c35	N77-32454
NASA-CASE-LEW-11026-1	c15	N73-33383	NASA-CASE-LEW-12051-1	c52	N75-33640
NASA-CASE-LEW-11058-1	c20	N74-13502	NASA-CASE-LEW-12053-1	c27	N74-34579
NASA-CASE-LEW-11065-2	c44	N76-14600	NASA-CASE-LEW-12053-2	c23	N77-32244
NASA-CASE-LEW-11069-1	c44	N74-14784	NASA-CASE-LEW-12078-1	c35	N75-30503
NASA-CASE-LEW-11071-1	c27	N73-27695	NASA-CASE-LEW-12081-1	c28	N76-22399
NASA-CASE-LEW-11072-1	c14	N73-24472	NASA-CASE-LEW-12082-1	c20	N77-10148
NASA-CASE-LEW-11072-2	c35	N76-15434	NASA-CASE-LEW-12083-1	c26	N76-18262
NASA-CASE-LEW-11076-1	c37	N74-21061	NASA-CASE-LEW-12094-1	c76	N76-25049
NASA-CASE-LEW-11076-2	c37	N74-32921	NASA-CASE-LEW-12095-1	c26	N76-17233
NASA-CASE-LEW-11076-3	c37	N75-30562	NASA-CASE-LEW-12118-1	c24	N77-27188
NASA-CASE-LEW-11076-4	c37	N76-15461	NASA-CASE-LEW-12119-1	c37	N76-20488
NASA-CASE-LEW-11087-1	c15	N73-30458	NASA-CASE-LEW-12131-1	c37	N77-24498
NASA-CASE-LEW-11087-2	c37	N74-15128	NASA-CASE-LEW-12137-1	c20	N76-20215
NASA-CASE-LEW-11087-3	c37	N74-21064	NASA-CASE-LEW-12159-1	c44	N76-15603
NASA-CASE-LEW-11101-1	c31	N73-32750	NASA-CASE-LEW-12164-1	c36	N77-32478
NASA-CASE-LEW-11118-1	c20	N74-32919	NASA-CASE-LEW-12174-1	c35	N76-19407
NASA-CASE-LEW-11118-2	c20	N76-14191	NASA-CASE-LEW-12185-1	c44	N77-15490
NASA-CASE-LEW-11152-1	c15	N73-32359	NASA-CASE-LEW-12217-1	c36	N77-18429
NASA-CASE-LEW-11158-1	c37	N77-28486	NASA-CASE-LEW-12220-1	c44	N77-14581
NASA-CASE-LEW-11159-1	c14	N73-28488	NASA-CASE-LEW-12232-1	c07	N77-18160
NASA-CASE-LEW-11162-1	c33	N74-12913	NASA-CASE-LEW-12236-1	c44	N77-17565
NASA-CASE-LEW-11169-1	c37	N76-23570	NASA-CASE-LEW-12245-1	c26	N77-20201
NASA-CASE-LEW-11179-1	c27	N76-16229	NASA-CASE-LEW-12252-1	c34	N75-19579
NASA-CASE-LEW-11180-1	c25	N73-25760	NASA-CASE-LEW-12258-1	c52	N77-28716
NASA-CASE-LEW-11187-1	c28	N73-19793	NASA-CASE-LEW-12270-1	c26	N77-32280
NASA-CASE-LEW-11188-1	c02	N74-20646	NASA-CASE-LEW-12273-1	c33	N77-17357
NASA-CASE-LEW-11192-1	c09	N73-13208	NASA-CASE-LEW-12277-1	c33	N76-28472
NASA-CASE-LEW-11227-1	c73	N75-30876	NASA-CASE-LEW-12312-1	c07	N77-32148
NASA-CASE-LEW-11262-1	c27	N74-13270	NASA-CASE-LEW-12358-1	c44	N77-18560
NASA-CASE-LEW-11267-1	c17	N73-32414	NASA-CASE-LEW-12363-1	c44	N76-19552
NASA-CASE-LEW-11274-1	c37	N75-21631	NASA-CASE-LEW-12364-1	c44	N77-22606
NASA-CASE-LEW-11286-1	c07	N74-27490	NASA-CASE-LEW-12417-1	c07	N76-22198
NASA-CASE-LEW-11325-1	c06	N73-27980	NASA-CASE-LEW-12419-1	c07	N77-14025
NASA-CASE-LEW-11326-1	c23	N73-30665	NASA-CASE-LEW-12441-1	c34	N75-19580
NASA-CASE-LEW-11330-1	c44	N76-14612	NASA-CASE-LEW-12444-1	c33	N77-28385
NASA-CASE-LEW-11330-2	c44	N76-33624	NASA-CASE-LEW-12465-1	c72	N76-27967
NASA-CASE-LEW-11358	c03	N71-26084	NASA-CASE-LEW-12477-1	c37	N77-32501
NASA-CASE-LEW-11359	c03	N71-28579	NASA-CASE-LEW-12508-1	c34	N77-15343
NASA-CASE-LEW-11359-2	c03	N72-20034	NASA-CASE-LEW-12508-2	c34	N77-32435
NASA-CASE-LEW-11387-1	c37	N74-18128	NASA-CASE-LEW-12513-1	c25	N77-18238
NASA-CASE-LEW-11388-1	c15	N73-32358	NASA-CASE-LEW-12527-1	c37	N77-32500
NASA-CASE-LEW-11388-2	c37	N74-21055	NASA-CASE-LEW-12541-1	c44	N77-22615
NASA-CASE-LEW-11390-2	c25	N76-27383	NASA-CASE-LEW-12542-1	c26	N77-24254
NASA-CASE-LEW-11390-3	c25	N76-29379	NASA-CASE-LEW-12543-1	c26	N77-21217
NASA-CASE-LEW-11402-1	c07	N74-28226	NASA-CASE-LEW-12550-1	c24	N77-19170
NASA-CASE-LEW-11484-1	c24	N75-33181	NASA-CASE-LEW-12552-1	c44	N77-17564

NUMBER INDEX

NASA-CASE-LEW-12554-1	c24	N76-23359	NASA-CASE-NFS-20207-1	c09	N73-32107
NASA-CASE-LEW-12569-1	c37	N77-24496	NASA-CASE-NFS-20240	c14	N71-26788
NASA-CASE-LEW-12587-1	c04	N77-31601	NASA-CASE-NFS-20242	c14	N73-19421
NASA-CASE-LEW-12608-1	c07	N77-27116	NASA-CASE-NFS-20243	c23	N73-13662
NASA-CASE-LEW-12619-1	c24	N77-19171	NASA-CASE-NFS-20249	c15	N72-11386
NASA-CASE-LEW-12649-1	c44	N76-31674	NASA-CASE-NFS-20261	c14	N71-27005
NASA-CASE-LEW-12661-1	c35	N77-32461	NASA-CASE-NFS-20284-1	c52	N74-12778
NASA-CASE-LEW-12668-1	c52	N76-23837	NASA-CASE-NFS-20299	c15	N72-11392
NASA-CASE-LEW-12718-1	c35	N77-20408	NASA-CASE-NFS-20317	c15	N73-13463
NASA-CASE-LEW-12723-1	c52	N77-30737	NASA-CASE-NFS-20325	c28	N71-27095
NASA-CASE-LEW-12760-1	c07	N77-17059	NASA-CASE-NFS-20332	c05	N72-20097
NASA-CASE-LEW-12775-1	c44	N77-24589	NASA-CASE-NFS-20332-2	c05	N73-25125
NASA-CASE-LEW-12785-1	c37	N77-13426	NASA-CASE-NFS-20333	c09	N71-13486
NASA-CASE-LEW-12791-1	c33	N77-24385	NASA-CASE-NFS-20335-1	c35	N74-10415
NASA-CASE-LEW-12819-1	c44	N77-24593	NASA-CASE-NFS-20355	c33	N71-25353
NASA-CASE-LEW-12830-1	c07	N77-23106	NASA-CASE-NFS-20385	c09	N71-24904
NASA-CASE-LEW-12906-1	c26	N77-32279	NASA-CASE-NFS-20386	c21	N71-19212
NASA-CASE-LEW-12955-1	c52	N77-30736	NASA-CASE-NFS-20395	c15	N71-24903
			NASA-CASE-NFS-20400	c31	N71-18611
NASA-CASE-NFS-06074	c15	N71-20393	NASA-CASE-NFS-20407	c09	N73-19235
NASA-CASE-NFS-07369	c15	N71-20443	NASA-CASE-NFS-20408	c18	N73-12604
NASA-CASE-NFS-10068	c10	N71-25139	NASA-CASE-NFS-20410	c15	N71-19214
NASA-CASE-NFS-10340	c15	N71-17628	NASA-CASE-NFS-20413	c15	N72-21463
NASA-CASE-NFS-10412	c12	N71-17578	NASA-CASE-NFS-20418	c14	N73-24473
NASA-CASE-NFS-10506	c06	N73-30100	NASA-CASE-NFS-20423	c15	N72-11388
NASA-CASE-NFS-10507	c06	N73-30101	NASA-CASE-NFS-20433	c15	N72-28496
NASA-CASE-NFS-10509	c06	N73-30103	NASA-CASE-NFS-20434	c11	N72-25288
NASA-CASE-NFS-10512	c06	N73-30099	NASA-CASE-NFS-20453	c15	N71-29133
NASA-CASE-NFS-10555	c11	N71-19494	NASA-CASE-NFS-20482	c15	N72-22492
NASA-CASE-NFS-11132	c15	N71-17649	NASA-CASE-NFS-20485	c14	N72-11365
NASA-CASE-NFS-11133	c31	N71-16222	NASA-CASE-NFS-20486-2	c27	N74-17283
NASA-CASE-NFS-11204	c14	N71-29134	NASA-CASE-NFS-20506-1	c35	N75-12273
NASA-CASE-NFS-11279	c16	N71-20400	NASA-CASE-NFS-20509	c11	N72-17183
NASA-CASE-NFS-11492	c06	N73-30102	NASA-CASE-NFS-20523	c14	N72-27471
NASA-CASE-NFS-11497	c28	N71-16224	NASA-CASE-NFS-20546-2	c14	N73-30389
NASA-CASE-NFS-11537	c14	N71-20442	NASA-CASE-NFS-20586	c15	N71-17686
NASA-CASE-NFS-12750	c27	N71-16223	NASA-CASE-NFS-20589	c25	N72-32688
NASA-CASE-NFS-12805	c15	N71-17805	NASA-CASE-NFS-20596	c14	N72-17324
NASA-CASE-NFS-12806	c14	N71-17588	NASA-CASE-NFS-20607-1	c37	N76-19436
NASA-CASE-NFS-12827	c14	N71-17656	NASA-CASE-NFS-20619	c28	N72-11708
NASA-CASE-NFS-12915	c11	N71-17600	NASA-CASE-NFS-20620	c11	N72-27262
NASA-CASE-NFS-13046	c07	N71-19433	NASA-CASE-NFS-20642	c14	N72-21407
NASA-CASE-NFS-13130	c10	N72-17173	NASA-CASE-NFS-20645-1	c37	N74-23070
NASA-CASE-NFS-13532	c18	N72-17532	NASA-CASE-NFS-20658-1	c14	N73-30386
NASA-CASE-NFS-13686	c15	N71-18132	NASA-CASE-NFS-20673	c14	N73-20476
NASA-CASE-NFS-13687	c09	N71-28691	NASA-CASE-NFS-20675	c26	N73-26751
NASA-CASE-NFS-13687-2	c09	N72-22198	NASA-CASE-NFS-20698	c15	N72-20446
NASA-CASE-NFS-13929	c15	N71-27091	NASA-CASE-NFS-20698-2	c15	N73-19457
NASA-CASE-NFS-13994-1	c06	N71-11240	NASA-CASE-NFS-20710	c11	N72-23215
NASA-CASE-NFS-13994-2	c06	N72-25148	NASA-CASE-NFS-20730-1	c39	N74-11331
NASA-CASE-NFS-14017	c14	N71-26627	NASA-CASE-NFS-20757	c09	N72-28225
NASA-CASE-NFS-14023	c33	N71-25351	NASA-CASE-NFS-20760	c14	N72-33377
NASA-CASE-NFS-14114	c33	N71-27862	NASA-CASE-NFS-20761-1	c44	N74-27519
NASA-CASE-NFS-14114-2	c09	N71-24807	NASA-CASE-NFS-20767-1	c38	N74-15130
NASA-CASE-NFS-14216	c14	N73-13418	NASA-CASE-NFS-20774	c14	N73-19420
NASA-CASE-NFS-14253	c33	N71-24858	NASA-CASE-NFS-20775-1	c31	N75-12161
NASA-CASE-NFS-14259	c15	N71-19213	NASA-CASE-NFS-20809	c23	N73-13660
NASA-CASE-NFS-14322	c08	N71-18692	NASA-CASE-NFS-20823-1	c16	N73-30476
NASA-CASE-NFS-14405	c15	N72-28495	NASA-CASE-NFS-20829	c12	N72-21310
NASA-CASE-NFS-14610	c09	N71-28886	NASA-CASE-NFS-20830	c15	N71-30028
NASA-CASE-NFS-14671	c05	N71-12341	NASA-CASE-NFS-20831	c28	N71-29153
NASA-CASE-NFS-14685	c31	N71-15689	NASA-CASE-NFS-20855	c15	N73-27405
NASA-CASE-NFS-14710	c09	N72-22195	NASA-CASE-NFS-20855-1	c15	N77-10112
NASA-CASE-NFS-14711	c15	N71-26185	NASA-CASE-NFS-20861-1	c18	N73-32437
NASA-CASE-NFS-14741	c09	N70-20737	NASA-CASE-NFS-20863	c31	N73-26876
NASA-CASE-NFS-14772	c15	N71-17692	NASA-CASE-NFS-20890	c14	N72-22439
NASA-CASE-NFS-14971	c15	N71-24984	NASA-CASE-NFS-20916	c14	N73-25460
NASA-CASE-NFS-15063	c14	N72-25412	NASA-CASE-NFS-20922	c31	N72-20840
NASA-CASE-NFS-15162	c14	N72-32452	NASA-CASE-NFS-20922-1	c18	N74-22136
NASA-CASE-NFS-15218-1	c37	N77-19457	NASA-CASE-NFS-20932-1	c35	N75-19616
NASA-CASE-NFS-16570-1	c05	N73-32013	NASA-CASE-NFS-20935	c09	N71-34212
NASA-CASE-NFS-16609-3	c03	N76-32140	NASA-CASE-NFS-20944	c15	N73-13466
NASA-CASE-NFS-18100	c15	N72-11390	NASA-CASE-NFS-20979	c06	N72-25151
NASA-CASE-NFS-18495	c15	N72-11385	NASA-CASE-NFS-20979-2	c06	N73-32030
NASA-CASE-NFS-19193-1	c37	N75-19686	NASA-CASE-NFS-20994-1	c35	N75-12271
NASA-CASE-NFS-19194-1	c37	N76-14460	NASA-CASE-NFS-21010-1	c05	N73-30078
NASA-CASE-NFS-19220-1	c20	N76-22296	NASA-CASE-NFS-21040-1	c06	N73-30098
NASA-CASE-NFS-19259-1	c36	N77-10516	NASA-CASE-NFS-21042	c07	N72-25171
NASA-CASE-NFS-19287-1	c34	N77-30399	NASA-CASE-NFS-21045-1	c35	N75-15932
NASA-CASE-NFS-20011	c18	N72-25566	NASA-CASE-NFS-21046-1	c14	N73-27377
NASA-CASE-NFS-20044	c14	N71-28993	NASA-CASE-NFS-21049-1	c52	N74-27864
NASA-CASE-NFS-20068	c07	N71-27191	NASA-CASE-NFS-21077-1	c24	N75-28135
NASA-CASE-NFS-20074	c16	N71-15565	NASA-CASE-NFS-21087-1	c35	N74-17153
NASA-CASE-NFS-20075	c09	N71-26133	NASA-CASE-NFS-21108-1	c34	N74-27861
NASA-CASE-NFS-20095	c24	N72-11595	NASA-CASE-NFS-21109-1	c05	N73-27941
NASA-CASE-NFS-20096	c14	N71-30026	NASA-CASE-NFS-21115-1	c54	N74-12779
NASA-CASE-NFS-20125	c16	N72-13437	NASA-CASE-NFS-21136-1	c35	N74-18323
NASA-CASE-NFS-20130	c28	N71-27585	NASA-CASE-NFS-21163-1	c54	N74-17853
NASA-CASE-NFS-20180	c16	N72-12440	NASA-CASE-NFS-21214-1	c09	N73-30181

NUMBER INDEX

NASA-CASE-MFS-21233-1	c38 N74-15395	NASA-CASE-MFS-22907-1	c26 N76-18257
NASA-CASE-MFS-21244-1	c36 N75-15028	NASA-CASE-MFS-22926-1	c24 N77-27187
NASA-CASE-MFS-21309-1	c37 N74-18125	NASA-CASE-MFS-22938-1	c34 N76-18374
NASA-CASE-MFS-21311-1	c20 N76-21275	NASA-CASE-MFS-22991-1	c34 N77-10463
NASA-CASE-MFS-21362	c11 N73-20267	NASA-CASE-MFS-23001-1	c76 N77-32919
NASA-CASE-MFS-21364-1	c37 N74-18126	NASA-CASE-MFS-23008-1	c35 N76-19405
NASA-CASE-MFS-21372-1	c74 N74-27866	NASA-CASE-MFS-23047-1	c37 N76-18454
NASA-CASE-MFS-21374-1	c33 N74-12951	NASA-CASE-MFS-23051-1	c37 N76-13500
NASA-CASE-MFS-21394-1	c34 N74-27744	NASA-CASE-MFS-23052-2	c14 N77-18179
NASA-CASE-MFS-21395-1	c25 N74-26948	NASA-CASE-MFS-23059-1	c44 N76-27664
NASA-CASE-MFS-21415-1	c52 N74-20728	NASA-CASE-MFS-23062-1	c37 N77-12402
NASA-CASE-MFS-21424-1	c34 N74-27730	NASA-CASE-MFS-23074-1	c54 N77-21844
NASA-CASE-MFS-21433	c09 N73-20232	NASA-CASE-MFS-23088-1	c37 N77-23483
NASA-CASE-MFS-21441-1	c14 N73-30392	NASA-CASE-MFS-23099-1	c09 N76-23273
NASA-CASE-MFS-21455-1	c35 N74-15146	NASA-CASE-MFS-23114-1	c35 N76-24529
NASA-CASE-MFS-21462-1	c33 N74-14935	NASA-CASE-MFS-23118-1	c35 N77-31465
NASA-CASE-MFS-21465-1	c10 N73-32145	NASA-CASE-MFS-23167-1	c44 N76-31667
NASA-CASE-MFS-21470-1	c44 N74-19870	NASA-CASE-MFS-23175-1	c35 N77-30436
NASA-CASE-MFS-21481-1	c37 N74-18127	NASA-CASE-MFS-23178-1	c35 N77-10493
NASA-CASE-MFS-21485-1	c37 N74-25968	NASA-CASE-MFS-23181-1	c33 N77-17351
NASA-CASE-MFS-21488-1	c14 N75-24794	NASA-CASE-MFS-23186-1	c33 N76-23483
NASA-CASE-MFS-21540-1	c32 N74-19790	NASA-CASE-MFS-23194-1	c74 N76-13909
NASA-CASE-MFS-21556-1	c35 N74-26945	NASA-CASE-MFS-23225-1	c52 N77-14735
NASA-CASE-MFS-21577-1	c19 N74-29410	NASA-CASE-MFS-23267-1	c35 N77-20401
NASA-CASE-MFS-21611-1	c54 N75-12616	NASA-CASE-MFS-23270-1	c44 N77-12511
NASA-CASE-MFS-21616-1	c33 N75-30429	NASA-CASE-MFS-23274-1	c76 N76-30084
NASA-CASE-MFS-21628-1	c44 N75-32581	NASA-CASE-MFS-23280-1	c33 N76-28471
NASA-CASE-MFS-21628-2	c44 N76-23675	NASA-CASE-MFS-23281-1	c35 N77-22450
NASA-CASE-MFS-21629	c14 N72-22442	NASA-CASE-MFS-23299-1	c39 N77-28511
NASA-CASE-MFS-21660-1	c35 N74-21017	NASA-CASE-MFS-23303-1	c32 N77-18307
NASA-CASE-MFS-21671-1	c33 N74-22885	NASA-CASE-MFS-23311-1	c37 N76-28554
NASA-CASE-MFS-21672-1	c74 N76-19935	NASA-CASE-MFS-23312-1	c33 N76-26394
NASA-CASE-MFS-21675-1	c25 N74-33378	NASA-CASE-MFS-23315-1	c76 N76-32029
NASA-CASE-MFS-21680-1	c18 N74-27397	NASA-CASE-MFS-23345-1	c27 N77-30237
NASA-CASE-MFS-21681-1	c18 N74-27397	NASA-CASE-MFS-23349-1	c44 N77-30613
NASA-CASE-MFS-21698-1	c33 N74-26732	NASA-CASE-MFS-23362-1	c47 N77-10753
NASA-CASE-MFS-21704-1	c35 N75-25124	NASA-CASE-MFS-23363-1	c35 N76-33469
NASA-CASE-MFS-21728-1	c35 N74-27865	NASA-CASE-MFS-23405-1	c26 N77-29260
NASA-CASE-MFS-21761-1	c35 N75-15931	NASA-CASE-MFS-23447-1	c37 N77-11403
NASA-CASE-MFS-21846-1	c37 N74-26976	NASA-CASE-MFS-23460-1	c09 N77-12070
NASA-CASE-MFS-21919-1	c10 N73-25243	NASA-CASE-MFS-23461-1	c35 N76-26449
NASA-CASE-MFS-21931-1	c37 N75-26372	NASA-CASE-MFS-23506-1	c24 N77-15105
NASA-CASE-MFS-22002-1	c44 N76-16612	NASA-CASE-MFS-23506-2	c37 N77-20441
NASA-CASE-MFS-22022-1	c37 N76-15460	NASA-CASE-MFS-23513-1	c74 N77-14842
NASA-CASE-MFS-22039-1	c09 N75-12968	NASA-CASE-MFS-23518-1	c44 N77-31610
NASA-CASE-MFS-22040-1	c35 N74-26946	NASA-CASE-MFS-23518-2	c44 N77-31611
NASA-CASE-MFS-22060-1	c35 N75-29380	NASA-CASE-MFS-23541-1	c33 N77-27308
NASA-CASE-MFS-22073-1	c33 N75-13139	NASA-CASE-MFS-23551-1	c04 N76-26175
NASA-CASE-MFS-22088-1	c33 N75-15874	NASA-CASE-MFS-23564-1	c13 N77-11079
NASA-CASE-MFS-22102-1	c54 N74-20725	NASA-CASE-MFS-23579-1	c12 N77-31213
NASA-CASE-MFS-22129-1	c33 N75-18477	NASA-CASE-MFS-23620-1	c37 N77-24497
NASA-CASE-MFS-22133-1	c33 N74-26977	NASA-CASE-MFS-23659-1	c33 N77-20341
NASA-CASE-MFS-22145-1	c75 N75-13625	NASA-CASE-MFS-23675-1	c74 N77-28937
NASA-CASE-MFS-22145-2	c75 N76-17951		
NASA-CASE-MFS-22189-1	c35 N75-19615	NASA-CASE-MSC-10959	c15 N71-26243
NASA-CASE-MFS-22208-1	c33 N75-26244	NASA-CASE-MSC-10960-1	c03 N71-24718
NASA-CASE-MFS-22234-1	c32 N76-33364	NASA-CASE-MSC-10966	c14 N71-19568
NASA-CASE-MFS-22283-1	c37 N75-33395	NASA-CASE-MSC-11010	c15 N71-19485
NASA-CASE-MFS-22287-1	c75 N76-14931	NASA-CASE-MSC-11072	c54 N74-32546
NASA-CASE-MFS-22323-1	c37 N76-14463	NASA-CASE-MSC-11253	c05 N71-12343
NASA-CASE-MFS-22324-1	c27 N75-27160	NASA-CASE-MSC-11277	c09 N71-29008
NASA-CASE-MFS-22342-1	c33 N75-30428	NASA-CASE-MSC-11561-1	c05 N73-32014
NASA-CASE-MFS-22343-1	c33 N74-34638	NASA-CASE-MSC-11817-1	c15 N71-26611
NASA-CASE-MFS-22355-1	c23 N76-15268	NASA-CASE-MSC-11847-1	c14 N72-11363
NASA-CASE-MFS-22356-1	c23 N75-30256	NASA-CASE-MSC-11849-1	c15 N72-22488
NASA-CASE-MFS-22409-2	c74 N76-26988	NASA-CASE-MSC-12033-1	c09 N71-13531
NASA-CASE-MFS-22411-1	c37 N74-21058	NASA-CASE-MSC-12049	c31 N71-16080
NASA-CASE-MFS-22458-1	c44 N77-10635	NASA-CASE-MSC-12052-1	c15 N71-24599
NASA-CASE-MFS-22517-1	c35 N76-18402	NASA-CASE-MSC-12084-1	c12 N71-17569
NASA-CASE-MFS-22537-1	c35 N75-27328	NASA-CASE-MSC-12086-1	c05 N71-12345
NASA-CASE-MFS-22560-1	c33 N77-14335	NASA-CASE-MSC-12101	c09 N71-18720
NASA-CASE-MFS-22562-1	c44 N76-14595	NASA-CASE-MSC-12105-1	c14 N72-21409
NASA-CASE-MFS-22631-1	c66 N76-19888	NASA-CASE-MSC-12109	c18 N71-26285
NASA-CASE-MFS-22636-1	c37 N76-22540	NASA-CASE-MSC-12111-1	c02 N71-11039
NASA-CASE-MFS-22649-1	c37 N75-25186	NASA-CASE-MSC-12116-1	c15 N71-17648
NASA-CASE-MFS-22671-1	c35 N75-21582	NASA-CASE-MSC-12121-1	c15 N71-27147
NASA-CASE-MFS-22671-2	c35 N77-17426	NASA-CASE-MSC-12135-1	c09 N71-12526
NASA-CASE-MFS-22707-1	c37 N76-15457	NASA-CASE-MSC-12139-1	c28 N71-14058
NASA-CASE-MFS-22729-1	c32 N76-21366	NASA-CASE-MSC-12143-1	c33 N72-17947
NASA-CASE-MFS-22734-1	c18 N75-19329	NASA-CASE-MSC-12146-1	c07 N72-17109
NASA-CASE-MFS-22743-1	c44 N76-22657	NASA-CASE-MSC-12165-1	c07 N71-33696
NASA-CASE-MFS-22744-1	c44 N76-24696	NASA-CASE-MSC-12168-1	c09 N71-18600
NASA-CASE-MFS-22749-1	c44 N76-14601	NASA-CASE-MSC-12178-1	c09 N71-13518
NASA-CASE-MFS-22758-1	c70 N75-26789	NASA-CASE-MSC-12205-1	c07 N71-27056
NASA-CASE-MFS-22787-1	c15 N77-10113	NASA-CASE-MSC-12206-1	c05 N71-17599
NASA-CASE-MFS-22880-1	c33 N76-31410	NASA-CASE-MSC-12209	c09 N71-24842
NASA-CASE-MFS-22880-2	c33 N77-31407	NASA-CASE-MSC-12223-1	c07 N71-26181
NASA-CASE-MFS-22905-1	c19 N76-22284	NASA-CASE-MSC-12233-1	c15 N72-25454
NASA-CASE-MFS-22906-1	c75 N76-24001	NASA-CASE-MSC-12233-2	c32 N73-13921

NUMBER INDEX

NASA-CASE-MSC-12243-1	.....	c05	N71-24728	NASA-CASE-MSC-13972-1	.....	c52	N74-10975
NASA-CASE-MSC-12259-1	.....	c07	N70-12616	NASA-CASE-MSC-13999-1	.....	c52	N74-26626
NASA-CASE-MSC-12259-2	.....	c07	N72-33146	NASA-CASE-MSC-14053-1	.....	c60	N74-12888
NASA-CASE-MSC-12279	.....	c15	N72-17450	NASA-CASE-MSC-14065-1	.....	c32	N74-26654
NASA-CASE-MSC-12279-1	.....	c15	N70-35679	NASA-CASE-MSC-14066-1	.....	c33	N74-27705
NASA-CASE-MSC-12280	.....	c27	N71-16348	NASA-CASE-MSC-14070-1	.....	c32	N74-32598
NASA-CASE-MSC-12293-1	.....	c14	N72-27411	NASA-CASE-MSC-14081-1	.....	c35	N74-27860
NASA-CASE-MSC-12297	.....	c14	N72-23457	NASA-CASE-MSC-14082-1	.....	c60	N76-23850
NASA-CASE-MSC-12324-1	.....	c05	N72-22093	NASA-CASE-MSC-14096-1	.....	c74	N74-15095
NASA-CASE-MSC-12327-1	.....	c35	N77-27368	NASA-CASE-MSC-14129-1	.....	c33	N75-18479
NASA-CASE-MSC-12357	.....	c15	N73-12489	NASA-CASE-MSC-14130-1	.....	c33	N74-32711
NASA-CASE-MSC-12363-1	.....	c14	N73-26431	NASA-CASE-MSC-14131-1	.....	c33	N75-19515
NASA-CASE-MSC-12372-1	.....	c31	N72-25842	NASA-CASE-MSC-14143-1	.....	c77	N75-20139
NASA-CASE-MSC-12389	.....	c33	N71-29052	NASA-CASE-MSC-14180-1	.....	c52	N76-14757
NASA-CASE-MSC-12390	.....	c27	N71-29155	NASA-CASE-MSC-14182-1	.....	c27	N76-14264
NASA-CASE-MSC-12391	.....	c30	N73-12884	NASA-CASE-MSC-14187-1	.....	c35	N74-32879
NASA-CASE-MSC-12393-1	.....	c02	N73-26006	NASA-CASE-MSC-14219-1	.....	c32	N74-27612
NASA-CASE-MSC-12394-1	.....	c08	N70-10942	NASA-CASE-MSC-14240-1	.....	c33	N75-14957
NASA-CASE-MSC-12395	.....	c09	N72-25257	NASA-CASE-MSC-14245-1	.....	c18	N75-27041
NASA-CASE-MSC-12396-1	.....	c03	N73-31988	NASA-CASE-MSC-14270-1	.....	c27	N76-22377
NASA-CASE-MSC-12397-1	.....	c05	N72-25119	NASA-CASE-MSC-14270-2	.....	c27	N76-23426
NASA-CASE-MSC-12398	.....	c05	N72-20098	NASA-CASE-MSC-14273-1	.....	c34	N75-33342
NASA-CASE-MSC-12404-1	.....	c23	N73-13661	NASA-CASE-MSC-14276-1	.....	c52	N77-14737
NASA-CASE-MSC-12408-1	.....	c46	N74-13011	NASA-CASE-MSC-14331-1	.....	c27	N76-24405
NASA-CASE-MSC-12411-1	.....	c05	N72-20096	NASA-CASE-MSC-14331-2	.....	c27	N76-24408
NASA-CASE-MSC-12423-1	.....	c91	N76-30131	NASA-CASE-MSC-14331-3	.....	c27	N76-24409
NASA-CASE-MSC-12428-1	.....	c10	N73-25240	NASA-CASE-MSC-14339-1	.....	c05	N75-24716
NASA-CASE-MSC-12433	.....	c31	N73-14854	NASA-CASE-MSC-14428-1	.....	c23	N77-17161
NASA-CASE-MSC-12448-1	.....	c14	N72-20394	NASA-CASE-MSC-14435-1	.....	c37	N76-18455
NASA-CASE-MSC-12458-1	.....	c08	N73-32081	NASA-CASE-MSC-14472-1	.....	c43	N77-10584
NASA-CASE-MSC-12462-1	.....	c32	N74-20809	NASA-CASE-MSC-14557-1	.....	c32	N76-16249
NASA-CASE-MSC-12494-1	.....	c32	N70-20810	NASA-CASE-MSC-14558-1	.....	c32	N75-21486
NASA-CASE-MSC-12506-1	.....	c32	N77-12239	NASA-CASE-MSC-14623-1	.....	c52	N77-28717
NASA-CASE-MSC-12531-1	.....	c35	N75-30504	NASA-CASE-MSC-14632-1	.....	c54	N75-25594
NASA-CASE-MSC-12549-1	.....	c37	N74-27903	NASA-CASE-MSC-14640-1	.....	c54	N76-14804
NASA-CASE-MSC-12559-1	.....	c18	N76-14186	NASA-CASE-MSC-14649-1	.....	c33	N76-16331
NASA-CASE-MSC-12561-1	.....	c18	N76-17185	NASA-CASE-MSC-14653-1	.....	c35	N77-19385
NASA-CASE-MSC-12564-1	.....	c54	N76-15792	NASA-CASE-MSC-14683-1	.....	c74	N77-18893
NASA-CASE-MSC-12568-1	.....	c24	N76-14204	NASA-CASE-MSC-14733-1	.....	c54	N76-24900
NASA-CASE-MSC-12593-1	.....	c17	N76-21250	NASA-CASE-MSC-14735-1	.....	c54	N76-24900
NASA-CASE-MSC-12607-1	.....	c32	N75-21485	NASA-CASE-MSC-14757-1	.....	c37	N76-13496
NASA-CASE-MSC-12609-1	.....	c05	N73-32012	NASA-CASE-MSC-14771-1	.....	c54	N77-32722
NASA-CASE-MSC-12611-1	.....	c12	N76-15189	NASA-CASE-MSC-14773-1	.....	c31	N75-32262
NASA-CASE-MSC-12615-1	.....	c37	N76-19437	NASA-CASE-MSC-14795-1	.....	c27	N76-15314
NASA-CASE-MSC-12616-1	.....	c32	N74-32601	NASA-CASE-MSC-14805-1	.....	c35	N76-26448
NASA-CASE-MSC-12617-1	.....	c35	N76-29552	NASA-CASE-MSC-14831-1	.....	c25	N76-23387
NASA-CASE-MSC-12618-1	.....	c74	N76-18917	NASA-CASE-MSC-14836-1	.....	c52	N76-27839
NASA-CASE-MSC-12619-1	.....	c39	N75-21671	NASA-CASE-MSC-14840-1	.....	c32	N77-24331
NASA-CASE-MSC-12619-2	.....	c16	N77-31237	NASA-CASE-MSC-14903-1	.....	c27	N76-28425
NASA-CASE-MSC-12631-1	.....	c24	N77-28225	NASA-CASE-MSC-14905-1	.....	c37	N77-28487
NASA-CASE-MSC-12631-2	.....	c05	N77-31131	NASA-CASE-MSC-14916-1	.....	c33	N77-13335
NASA-CASE-MSC-12640-1	.....	c74	N76-31998	NASA-CASE-MSC-14939-1	.....	c33	N77-19320
NASA-CASE-MSC-12662-1	.....	c24	N75-16635	NASA-CASE-MSC-15158-1	.....	c14	N72-17325
NASA-CASE-MSC-12669-1	.....	c44	N76-16621	NASA-CASE-MSC-15474-1	.....	c15	N77-26162
NASA-CASE-MSC-12709-1	.....	c33	N77-24375	NASA-CASE-MSC-15567-1	.....	c33	N73-16918
NASA-CASE-MSC-12731-1	.....	c37	N76-26511	NASA-CASE-MSC-15626-1	.....	c14	N72-25411
NASA-CASE-MSC-12737-1	.....	c34	N77-22423	NASA-CASE-MSC-16000-1	.....	c07	N77-13062
NASA-CASE-MSC-12743-1	.....	c32	N77-19290	NASA-CASE-MSC-16043-1	.....	c37	N77-15397
NASA-CASE-MSC-12745-1	.....	c33	N77-13338	NASA-CASE-MSC-16074-1	.....	c27	N77-14262
NASA-CASE-MSC-13047-1	.....	c31	N71-25434	NASA-CASE-MSC-16098-1	.....	c51	N77-24755
NASA-CASE-MSC-13110-1	.....	c08	N72-22163	NASA-CASE-MSC-16100-1	.....	c32	N77-15233
NASA-CASE-MSC-13112	.....	c03	N71-11057	NASA-CASE-MSC-16170-1	.....	c32	N77-12248
NASA-CASE-MSC-13140	.....	c05	N72-11085	NASA-CASE-MSC-16182-1	.....	c54	N77-21847
NASA-CASE-MSC-13201-1	.....	c07	N71-28429	NASA-CASE-MSC-16253-1	.....	c43	N77-31583
NASA-CASE-MSC-13276-1	.....	c14	N71-27058	NASA-CASE-MSC-16299-1	.....	c45	N77-31668
NASA-CASE-MSC-13281	.....	c31	N72-18859	NASA-CASE-MSC-17832-1	.....	c33	N74-14956
NASA-CASE-MSC-13282-1	.....	c05	N71-24729	NASA-CASE-MSC-19095-1	.....	c37	N75-19683
NASA-CASE-MSC-13332-1	.....	c14	N72-21408	NASA-CASE-MSC-19372-1	.....	c39	N76-31562
NASA-CASE-MSC-13335-1	.....	c06	N72-31140	NASA-CASE-MSC-19442-1	.....	c74	N77-10899
NASA-CASE-MSC-13397-1	.....	c21	N72-25595	NASA-CASE-MSC-19514-1	.....	c37	N77-19459
NASA-CASE-MSC-13407-1	.....	c10	N72-20225	NASA-CASE-MSC-19523-1	.....	c31	N76-16245
NASA-CASE-MSC-13436-1	.....	c05	N73-32015	NASA-CASE-MSC-19535-1	.....	c37	N77-32499
NASA-CASE-MSC-13492-1	.....	c10	N71-28860	NASA-CASE-MSC-19536-1	.....	c37	N77-22482
NASA-CASE-MSC-13512-1	.....	c15	N72-22485	NASA-CASE-MSC-19546-1	.....	c37	N77-25536
NASA-CASE-MSC-13530-2	.....	c23	N75-14834	NASA-CASE-MSC-19568-1	.....	c37	N76-23585
NASA-CASE-MSC-13540-1	.....	c05	N72-33096	NASA-CASE-MSC-19666-1	.....	c37	N76-31529
NASA-CASE-MSC-13587-1	.....	c15	N73-30459	NASA-CASE-MSC-19693-1	.....	c26	N76-21401
NASA-CASE-MSC-13601-2	.....	c54	N75-27759	NASA-CASE-MSC-19706-1	.....	c09	N77-19077
NASA-CASE-MSC-13604-1	.....	c05	N73-13114	NASA-CASE-MSC-90153-2	.....	c05	N72-25120
NASA-CASE-MSC-13609-1	.....	c05	N72-25122				
NASA-CASE-MSC-13648	.....	c05	N72-27103				
NASA-CASE-MSC-13746-1	.....	c10	N73-32143	NASA-CASE-NPO-10003	.....	c10	N71-26415
NASA-CASE-MSC-13789-1	.....	c11	N73-32152	NASA-CASE-NPO-10034	.....	c15	N71-17685
NASA-CASE-MSC-13802-2	.....	c35	N76-15431	NASA-CASE-NPO-10037	.....	c09	N71-19610
NASA-CASE-MSC-13855-1	.....	c35	N74-17885	NASA-CASE-NPO-10046	.....	c28	N72-17843
NASA-CASE-MSC-13907-1	.....	c10	N73-26230	NASA-CASE-NPO-10051	.....	c18	N71-24934
NASA-CASE-MSC-13912-1	.....	c32	N74-30524	NASA-CASE-NPO-10064	.....	c15	N71-17693
NASA-CASE-MSC-13917-1	.....	c05	N72-15098	NASA-CASE-NPO-10066	.....	c09	N71-18598
NASA-CASE-MSC-13932-1	.....	c62	N74-14920	NASA-CASE-NPO-10068	.....	c08	N71-19288

NUMBER INDEX

NASA-CASE-NFO-10070	c15	N71-27372	NASA-CASE-NFO-10679	c15	N72-21462
NASA-CASE-NFO-10096	c07	N71-24583	NASA-CASE-NFO-10680	c31	N73-14855
NASA-CASE-NFO-10109	c03	N71-11049	NASA-CASE-NFO-10682	c15	N70-34699
NASA-CASE-NPC-10112	c08	N71-12502	NASA-CASE-NFO-10691	c14	N71-26199
NASA-CASE-NPC-10117	c15	N71-15608	NASA-CASE-NFO-10694	c09	N72-20200
NASA-CASE-NPC-10118	c07	N71-24741	NASA-CASE-NFO-10700	c07	N71-33613
NASA-CASE-NFO-10122	c12	N71-17631	NASA-CASE-NFO-10701	c06	N71-28620
NASA-CASE-NFO-10123	c15	N71-24835	NASA-CASE-NFO-10704	c15	N72-20445
NASA-CASE-NFO-10138	c33	N71-16357	NASA-CASE-NFO-10711-1	c35	N77-21392
NASA-CASE-NPC-10140	c07	N71-24742	NASA-CASE-NFO-10714	c06	N69-31244
NASA-CASE-NPC-10141	c11	N71-24964	NASA-CASE-NFO-10716	c09	N71-24892
NASA-CASE-NPC-10143	c10	N71-26326	NASA-CASE-NFO-10721	c15	N72-27484
NASA-CASE-NPC-10144	c14	N71-17701	NASA-CASE-NFO-10722	c09	N72-20199
NASA-CASE-NPC-10150	c08	N71-24650	NASA-CASE-NFO-10737	c28	N72-11709
NASA-CASE-NPC-10158	c33	N71-16356	NASA-CASE-NFO-10743	c08	N72-21199
NASA-CASE-NFO-10166-1	c07	N73-22076	NASA-CASE-NFO-10745	c08	N72-22164
NASA-CASE-NFO-10166-2	c35	N76-16391	NASA-CASE-NFO-10747	c03	N72-24042
NASA-CASE-NFO-10169	c10	N71-24844	NASA-CASE-NFO-10748	c08	N72-20177
NASA-CASE-NPC-10173	c15	N71-24696	NASA-CASE-NFO-10753	c03	N72-26031
NASA-CASE-NFO-10174	c14	N71-18465	NASA-CASE-NFO-10755	c15	N71-27084
NASA-CASE-NFO-10175	c14	N71-18625	NASA-CASE-NFO-10758	c14	N73-14427
NASA-CASE-NFO-10185	c10	N71-26339	NASA-CASE-NFO-10760	c09	N72-25254
NASA-CASE-NFO-10188	c03	N71-20273	NASA-CASE-NFO-10764-1	c14	N73-14428
NASA-CASE-NFO-10189-1	c33	N77-21314	NASA-CASE-NFO-10764-2	c35	N75-25122
NASA-CASE-NFO-10194	c03	N71-20407	NASA-CASE-NFO-10765	c06	N72-20121
NASA-CASE-NFO-10198	c09	N71-24806	NASA-CASE-NFO-10767-1	c06	N73-33076
NASA-CASE-NFO-10199	c09	N72-17156	NASA-CASE-NFO-10767-2	c06	N72-27151
NASA-CASE-NFO-10201	c08	N71-18694	NASA-CASE-NFO-10768	c06	N71-27254
NASA-CASE-NFO-10214	c10	N71-26577	NASA-CASE-NFO-10768-2	c06	N72-27144
NASA-CASE-NFO-10230	c09	N71-12520	NASA-CASE-NFO-10769	c08	N72-11171
NASA-CASE-NFO-10231	c07	N71-26101	NASA-CASE-NFO-10774	c06	N72-17095
NASA-CASE-NFO-10234	c06	N72-17094	NASA-CASE-NFO-10778	c14	N72-11364
NASA-CASE-NPC-10242	c09	N71-24803	NASA-CASE-NFO-10781-1	c33	N77-21314
NASA-CASE-NPC-10244	c15	N72-26371	NASA-CASE-NFO-10790-1	c33	N77-21316
NASA-CASE-NFO-10250	c23	N71-16212	NASA-CASE-NFO-10796	c15	N71-27068
NASA-CASE-NPC-10251	c10	N71-27365	NASA-CASE-NFO-10808	c15	N71-27432
NASA-CASE-NFO-10271	c17	N71-16393	NASA-CASE-NFO-10810	c14	N71-27323
NASA-CASE-NFO-10298	c12	N71-17661	NASA-CASE-NFO-10812	c15	N73-13464
NASA-CASE-NFO-10300	c14	N71-17662	NASA-CASE-NFO-10817-1	c08	N73-30135
NASA-CASE-NPC-10301	c07	N72-11148	NASA-CASE-NFO-10821	c03	N71-19545
NASA-CASE-NPC-10302	c10	N71-26142	NASA-CASE-NFO-10828	c33	N72-17948
NASA-CASE-NPC-10303	c07	N72-22127	NASA-CASE-NFO-10831	c33	N72-20915
NASA-CASE-NPC-10309	c15	N69-23190	NASA-CASE-NFO-10832	c14	N72-21405
NASA-CASE-NFO-10311	c31	N71-15643	NASA-CASE-NFO-10844	c07	N72-20140
NASA-CASE-NFO-10316-1	c37	N77-22479	NASA-CASE-NFO-10851	c07	N71-24613
NASA-CASE-NFO-10320	c14	N71-17655	NASA-CASE-NFO-10857-1	c37	N77-22478
NASA-CASE-NFO-10331	c09	N71-26701	NASA-CASE-NFO-10862	c06	N72-22107
NASA-CASE-NFO-10337	c14	N71-15604	NASA-CASE-NFO-10863	c06	N70-11251
NASA-CASE-NFO-10342	c10	N71-33407	NASA-CASE-NFO-10863-2	c06	N72-25152
NASA-CASE-NPC-10343	c07	N71-27341	NASA-CASE-NFO-10870-1	c33	N77-22386
NASA-CASE-NPC-10344	c10	N71-26544	NASA-CASE-NFO-10883	c31	N72-22874
NASA-CASE-NPC-10348	c10	N71-12554	NASA-CASE-NFO-10890	c11	N73-12665
NASA-CASE-NFO-10351	c08	N71-12503	NASA-CASE-NFO-10893	c27	N73-22710
NASA-CASE-NPC-10373	c03	N71-18698	NASA-CASE-NFO-10895	c14	N73-20478
NASA-CASE-NFO-10388	c07	N71-24622	NASA-CASE-NFO-10998-1	c06	N73-32029
NASA-CASE-NFO-10401	c03	N72-20033	NASA-CASE-NFO-10999-1	c06	N73-32029
NASA-CASE-NFO-10404	c03	N71-12255	NASA-CASE-NFO-11001	c07	N72-21118
NASA-CASE-NPC-10412	c09	N71-28421	NASA-CASE-NFO-11002	c14	N72-22441
NASA-CASE-NFO-10416	c12	N71-27332	NASA-CASE-NFO-11012	c15	N72-11391
NASA-CASE-NFO-10417	c16	N71-33410	NASA-CASE-NFO-11013	c11	N72-22247
NASA-CASE-NFO-10431	c15	N71-29132	NASA-CASE-NFO-11016	c08	N72-31226
NASA-CASE-NPC-10440	c15	N72-21466	NASA-CASE-NFO-11018	c08	N72-21200
NASA-CASE-NFO-10447	c06	N70-11252	NASA-CASE-NFO-11021	c03	N72-20032
NASA-CASE-NPC-10467	c23	N71-26654	NASA-CASE-NFO-11023	c09	N72-17155
NASA-CASE-NFO-10468	c23	N71-33229	NASA-CASE-NFO-11031	c07	N71-33606
NASA-CASE-NFO-10539	c07	N71-11285	NASA-CASE-NFO-11036	c15	N72-24522
NASA-CASE-NFO-10542	c09	N72-27228	NASA-CASE-NFO-11059	c15	N72-17454
NASA-CASE-NFO-10548	c16	N71-24831	NASA-CASE-NFO-11064	c07	N72-11150
NASA-CASE-NFO-10556	c14	N71-27185	NASA-CASE-NFO-11078	c09	N72-25262
NASA-CASE-NFO-10560	c08	N72-22166	NASA-CASE-NFO-11082	c08	N72-22167
NASA-CASE-NFO-10567	c08	N71-24633	NASA-CASE-NFO-11087	c23	N71-29125
NASA-CASE-NFO-10575	c03	N72-25019	NASA-CASE-NFO-11088	c08	N71-29034
NASA-CASE-NFO-10591	c03	N72-22041	NASA-CASE-NFO-11091	c18	N72-22567
NASA-CASE-NFO-10595	c10	N71-25917	NASA-CASE-NFO-11095	c15	N72-25455
NASA-CASE-NFO-10596	c06	N71-25929	NASA-CASE-NFO-11103-1	c35	N77-27367
NASA-CASE-NFO-10606	c15	N72-25451	NASA-CASE-NFO-11104	c08	N72-22165
NASA-CASE-NFO-10607	c09	N71-27232	NASA-CASE-NFO-11106	c14	N70-34697
NASA-CASE-NFO-10617-1	c35	N74-22095	NASA-CASE-NFO-11118	c03	N72-25021
NASA-CASE-NFO-10619-1	c35	N77-21393	NASA-CASE-NFO-11120-1	c34	N74-18552
NASA-CASE-NFO-10625	c09	N71-26182	NASA-CASE-NFO-11129	c09	N72-33204
NASA-CASE-NFO-10629	c08	N72-18184	NASA-CASE-NFO-11130	c08	N72-20176
NASA-CASE-NFO-10633	c03	N72-28025	NASA-CASE-NFO-11133	c10	N72-20221
NASA-CASE-NFO-10634	c23	N72-25619	NASA-CASE-NFO-11134	c09	N72-21246
NASA-CASE-NFO-10636	c08	N72-25210	NASA-CASE-NFO-11138	c03	N70-34646
NASA-CASE-NFO-10637	c15	N72-12409	NASA-CASE-NFO-11140	c15	N72-17455
NASA-CASE-NFO-10646	c15	N71-28467	NASA-CASE-NFO-11147	c14	N72-27408
NASA-CASE-NFO-10649	c07	N71-24840	NASA-CASE-NFO-11156-2	c33	N75-31331
NASA-CASE-NFO-10671	c15	N72-20443	NASA-CASE-NFO-11161	c08	N72-25207
NASA-CASE-NFO-10677	c05	N72-11084	NASA-CASE-NFO-11177	c15	N72-17453

NUMBER INDEX

NASA-CASE-NEC-11190	c03	N71-34044	NASA-CASE-NPO-11932-1	c35	N74-23040
NASA-CASE-NPO-11191-1	c33	N77-22386	NASA-CASE-NPO-11941-1	c10	N73-27171
NASA-CASE-NPO-11194	c08	N72-25209	NASA-CASE-NPC-11942-1	c33	N73-32818
NASA-CASE-NPO-11201	c14	N72-27409	NASA-CASE-NPO-11945-1	c36	N76-18427
NASA-CASE-NPO-11202	c15	N72-25450	NASA-CASE-NPO-11948-1	c33	N74-32712
NASA-CASE-NPO-11203	c10	N72-20224	NASA-CASE-NEC-11951-1	c37	N74-21065
NASA-CASE-NPC-11210	c11	N72-20244	NASA-CASE-NPO-11961-1	c44	N76-18643
NASA-CASE-NPO-11213	c15	N73-20514	NASA-CASE-NPO-11962-1	c33	N74-10194
NASA-CASE-NPO-11222	c15	N72-25456	NASA-CASE-NPO-11966-1	c33	N74-17928
NASA-CASE-NPO-11239	c14	N73-12446	NASA-CASE-NPO-11975-1	c28	N74-33209
NASA-CASE-NPO-11243	c07	N72-20154	NASA-CASE-NPO-12000	c27	N72-25699
NASA-CASE-NPO-11253	c09	N72-17157	NASA-CASE-NPO-12015	c27	N73-16764
NASA-CASE-NPC-11264	c07	N72-25174	NASA-CASE-NPO-12061-1	c27	N76-16228
NASA-CASE-NPC-11282	c10	N73-16205	NASA-CASE-NPO-12070-1	c28	N73-32606
NASA-CASE-NPO-11283	c09	N72-25260	NASA-CASE-NPO-12072	c28	N72-22772
NASA-CASE-NPO-11291-1	c14	N73-30388	NASA-CASE-NPO-12106	c09	N73-15235
NASA-CASE-NPO-11302-1	c07	N73-13149	NASA-CASE-NPO-12107	c08	N71-27255
NASA-CASE-NPO-11302-2	c32	N74-10132	NASA-CASE-NPO-12109	c11	N72-22245
NASA-CASE-NPO-11304	c14	N73-26430	NASA-CASE-NPO-12119-1	c52	N75-15270
NASA-CASE-NPO-11307-1	c10	N73-30205	NASA-CASE-NEC-12122-1	c24	N76-14203
NASA-CASE-NPO-11311	c14	N72-25414	NASA-CASE-NPO-12127-1	c91	N74-13130
NASA-CASE-NPO-11317-2	c36	N74-13205	NASA-CASE-NPO-12128-1	c14	N73-32317
NASA-CASE-NEC-11322	c06	N72-25146	NASA-CASE-NPO-12130-1	c25	N75-14844
NASA-CASE-NPO-11330	c33	N73-26958	NASA-CASE-NPO-12134-1	c33	N76-31409
NASA-CASE-NPO-11333	c08	N72-22162	NASA-CASE-NEC-12142-1	c38	N76-28563
NASA-CASE-NPO-11338	c08	N72-25208	NASA-CASE-NPO-13044-1	c35	N74-15094
NASA-CASE-NPO-11340	c15	N72-33477	NASA-CASE-NPO-13050-1	c36	N75-15029
NASA-CASE-NPO-11342	c09	N72-25248	NASA-CASE-NEC-13058-1	c37	N77-22480
NASA-CASE-NPO-11358	c07	N72-25172	NASA-CASE-NPO-13059-1	c37	N76-20480
NASA-CASE-NPC-11361	c07	N72-32169	NASA-CASE-NPO-13063-1	c25	N76-18245
NASA-CASE-NPC-11366	c11	N73-26238	NASA-CASE-NPO-13065-1	c52	N74-26625
NASA-CASE-NPO-11369	c15	N73-13467	NASA-CASE-NPO-13067-1	c60	N76-18800
NASA-CASE-NPO-11371	c08	N73-12177	NASA-CASE-NPO-13081-1	c33	N74-22814
NASA-CASE-NPO-11373	c13	N72-25323	NASA-CASE-NPO-13086-1	c15	N73-12495
NASA-CASE-NPO-11377	c15	N73-27406	NASA-CASE-NPO-13087-2	c44	N76-31666
NASA-CASE-NPC-11387	c14	N73-14429	NASA-CASE-NEC-13091-1	c09	N73-12214
NASA-CASE-NPC-11388	c03	N72-23048	NASA-CASE-NPO-13096-1	c37	N77-22480
NASA-CASE-NPO-11403-1	c33	N77-22386	NASA-CASE-NPO-13103-1	c32	N74-20811
NASA-CASE-NPO-11406	c08	N73-12175	NASA-CASE-NPO-13105-1	c37	N74-21060
NASA-CASE-NPO-11417	c15	N73-24513	NASA-CASE-NPO-13112-1	c73	N74-26767
NASA-CASE-NPO-11418-1	c14	N73-13420	NASA-CASE-NPO-13114-2	c44	N76-15573
NASA-CASE-NPO-11426	c07	N73-26119	NASA-CASE-NPO-13120-1	c27	N76-15311
NASA-CASE-NEC-11429-1	c74	N77-21941	NASA-CASE-NPO-13121-1	c73	N77-18891
NASA-CASE-NPO-11432-2	c35	N74-15090	NASA-CASE-NPO-13125-1	c33	N75-19519
NASA-CASE-NPO-11433	c18	N71-31140	NASA-CASE-NPO-13127-1	c35	N74-23040
NASA-CASE-NPO-11437	c16	N72-28521	NASA-CASE-NPO-13131-1	c36	N75-19652
NASA-CASE-NPO-11456	c08	N73-26176	NASA-CASE-NEC-13138-1	c33	N74-17927
NASA-CASE-NPO-11458	c28	N72-23810	NASA-CASE-NPO-13139-1	c60	N76-21914
NASA-CASE-NPC-11479	c15	N73-13462	NASA-CASE-NPO-13140-1	c32	N75-24982
NASA-CASE-NPO-11481	c21	N73-13644	NASA-CASE-NPO-13147-1	c36	N77-25502
NASA-CASE-NEC-11493	c14	N73-12447	NASA-CASE-NPO-13157-1	c37	N74-32918
NASA-CASE-NPO-11497	c08	N73-25206	NASA-CASE-NEC-13159-1	c33	N74-17928
NASA-CASE-NPO-11510-1	c33	N77-21315	NASA-CASE-NPO-13160-1	c35	N74-18090
NASA-CASE-NPO-11515-1	c33	N77-13315	NASA-CASE-NPO-13170-1	c35	N76-14430
NASA-CASE-NPO-11548	c07	N73-26118	NASA-CASE-NPO-13171-1	c32	N74-11000
NASA-CASE-NPO-11556	c12	N72-25292	NASA-CASE-NPO-13175-1	c36	N75-31427
NASA-CASE-NPO-11559	c28	N73-24784	NASA-CASE-NPO-13201-1	c37	N75-15050
NASA-CASE-NPO-11569	c10	N73-26229	NASA-CASE-NEC-13205-1	c31	N74-32917
NASA-CASE-NPO-11572	c07	N73-16121	NASA-CASE-NPO-13214-1	c35	N75-25123
NASA-CASE-NPO-11593-1	c07	N73-28012	NASA-CASE-NPO-13215-1	c35	N75-25123
NASA-CASE-NPO-11609-2	c27	N77-31308	NASA-CASE-NPO-13217-1	c32	N75-26194
NASA-CASE-NPO-11623-1	c71	N74-31148	NASA-CASE-NPO-13231-1	c45	N75-27585
NASA-CASE-NPO-11628-1	c07	N73-30113	NASA-CASE-NPO-13237-1	c44	N76-18641
NASA-CASE-NPO-11630	c08	N72-33172	NASA-CASE-NEC-13253-1	c37	N75-18573
NASA-CASE-NPC-11631	c10	N73-12244	NASA-CASE-NPO-13263-1	c12	N75-24774
NASA-CASE-NPO-11659-1	c35	N74-11283	NASA-CASE-NPO-13281-1	c37	N75-13266
NASA-CASE-NPO-11661	c07	N73-14130	NASA-CASE-NPO-13292-1	c32	N75-15854
NASA-CASE-NPO-11682-1	c35	N74-15127	NASA-CASE-NPO-13303-1	c20	N75-24837
NASA-CASE-NPC-11686	c14	N73-25462	NASA-CASE-NEC-13308-1	c36	N75-30524
NASA-CASE-NPO-11703-1	c10	N73-32144	NASA-CASE-NPO-13313-1	c54	N75-27761
NASA-CASE-NPO-11707	c07	N73-25161	NASA-CASE-NPO-13321-1	c32	N75-26195
NASA-CASE-NPC-11738-1	c09	N73-30185	NASA-CASE-NPO-13327-1	c35	N75-23910
NASA-CASE-NPO-11743-1	c28	N74-27425	NASA-CASE-NPO-13342-1	c37	N76-16446
NASA-CASE-NPO-11749	c14	N73-28486	NASA-CASE-NPO-13342-2	c44	N76-29700
NASA-CASE-NPC-11751	c07	N73-24176	NASA-CASE-NPO-13345-1	c37	N75-19684
NASA-CASE-NPO-11758-1	c31	N74-23065	NASA-CASE-NPO-13346-1	c36	N76-29575
NASA-CASE-NPO-11771	c03	N73-20080	NASA-CASE-NPO-13348-1	c33	N75-31332
NASA-CASE-NPO-11775	c26	N72-28761	NASA-CASE-NPO-13360-1	c37	N75-25185
NASA-CASE-NPO-11806-1	c44	N74-19693	NASA-CASE-NPO-13374-1	c33	N75-19524
NASA-CASE-NEC-11820-1	c32	N74-19788	NASA-CASE-NPO-13385-1	c33	N76-18345
NASA-CASE-NPC-11821-1	c08	N73-26175	NASA-CASE-NPO-13386-1	c54	N75-27758
NASA-CASE-NPO-11850-1	c32	N74-12912	NASA-CASE-NPO-13388-1	c35	N76-16390
NASA-CASE-NPO-11856-1	c36	N74-15145	NASA-CASE-NEC-13391-1	c34	N76-27515
NASA-CASE-NPO-11861-1	c36	N74-20009	NASA-CASE-NPO-13396-1	c35	N76-18401
NASA-CASE-NPC-11868	c10	N73-20254	NASA-CASE-NPO-13402-1	c37	N76-18457
NASA-CASE-NPO-11880	c28	N73-24783	NASA-CASE-NPO-13422-1	c60	N76-14818
NASA-CASE-NPO-11905-1	c33	N74-12887	NASA-CASE-NPO-13423-1	c33	N75-31329
NASA-CASE-NPC-11919-1	c35	N74-11284	NASA-CASE-NPO-13426-1	c33	N75-31330
NASA-CASE-NPC-11921-1	c32	N74-30523	NASA-CASE-NPO-13428-1	c60	N77-12721

NUMBER INDEX

NASA-CASE-WFC-13435-1	c31	N76-14284	NASA-CASE-NPO-13836-1	c32	N76-31373
NASA-CASE-NPO-13436-1	c37	N76-20480	NASA-CASE-NPO-13839-1	c31	N77-15219
NASA-CASE-NPO-13443-1	c76	N76-20994	NASA-CASE-NPO-13847-2	c85	N77-17949
NASA-CASE-NPO-13447-1	c60	N77-12721	NASA-CASE-NPO-13848-2	c85	N77-17949
NASA-CASE-NPO-13448-2	c36	N77-24469	NASA-CASE-NPO-13858-1	c28	N77-17258
NASA-CASE-NPO-13449-1	c36	N75-32441	NASA-CASE-NPO-13859-1	c28	N77-17258
NASA-CASE-NPO-13451-1	c33	N76-14373	NASA-CASE-NPO-13862-1	c32	N77-17325
NASA-CASE-WFC-13459-1	c31	N77-10229	NASA-CASE-NPO-13867-1	c27	N77-22257
NASA-CASE-NPO-13462-1	c35	N76-24524	NASA-CASE-NPO-13872-1	c33	N77-17359
NASA-CASE-NPO-13464-1	c44	N76-18642	NASA-CASE-NPO-13886-1	c32	N77-11269
NASA-CASE-NPO-13464-2	c44	N76-29704	NASA-CASE-NPO-13906-1	c54	N77-32723
NASA-CASE-NPO-13465-1	c32	N76-31372	NASA-CASE-NPO-13909-1	c33	N77-17358
NASA-CASE-NPO-13474-1	c45	N76-21742	NASA-CASE-NPO-13913-1	c52	N77-19750
NASA-CASE-NPO-13479-1	c35	N77-10492	NASA-CASE-NPO-13914-1	c44	N77-19579
NASA-CASE-NPO-13482-1	c44	N74-30448	NASA-CASE-NPO-13921-1	c44	N77-24590
NASA-CASE-NPO-13490-1	c36	N76-31512	NASA-CASE-NPO-13945-1	c36	N77-19418
NASA-CASE-NPO-13497-1	c44	N76-14602	NASA-CASE-NPO-13948-1	c35	N77-28470
NASA-CASE-NPO-13504-1	c33	N75-30430	NASA-CASE-NPO-13955-1	c32	N77-28358
NASA-CASE-NPO-13506-1	c35	N76-15435	NASA-CASE-NPO-13956-1	c32	N77-28358
NASA-CASE-NPO-13510-1	c44	N77-32581	NASA-CASE-NPO-13957-1	c32	N77-28358
NASA-CASE-NPO-13512-1	c33	N77-10428	NASA-CASE-NPO-13969-2	c76	N77-30984
NASA-CASE-NPO-13519-1	c33	N76-19338	NASA-CASE-NPO-13982-1	c32	N77-24341
NASA-CASE-NPO-13528-1	c09	N77-10071	NASA-CASE-NPO-13993-1	c36	N77-24468
NASA-CASE-NPO-13531-1	c36	N76-24553	NASA-CASE-NPO-14009-1	c32	N77-28357
NASA-CASE-NPO-13532-1	c36	N75-15973	NASA-CASE-NPO-14014-1	c37	N77-31501
NASA-CASE-NPO-13535-1	c37	N76-31524	NASA-CASE-NPO-14021-1	c27	N77-32313
NASA-CASE-NPO-13540-1	c35	N77-14409	NASA-CASE-NPO-14022-1	c32	N77-24338
NASA-CASE-NPO-13543-1	c32	N77-12240	NASA-CASE-NPO-14056-1	c33	N77-32802
NASA-CASE-NPO-13544-1	c36	N76-18428	NASA-CASE-NPO-14058-1	c44	N77-30616
NASA-CASE-NPO-13545-1	c32	N77-12240	NASA-CASE-NPO-14103-1	c28	N77-25346
NASA-CASE-NPO-13550-1	c36	N77-26477			
NASA-CASE-NPO-13553-1	c33	N76-32457	NASA-CASE-NUC-10107-1	c33	N74-17930
NASA-CASE-NPO-13560-1	c44	N77-10636			
NASA-CASE-NPO-13561-1	c44	N77-10636	NASA-CASE-RE-ARC-10329-2	c52	N76-30793
NASA-CASE-NPO-13566-1	c25	N77-32255			
NASA-CASE-NPO-13567-1	c44	N76-29701	NASA-CASE-WLP-10002	c15	N72-17451
NASA-CASE-NPO-13568-1	c32	N76-21365			
NASA-CASE-NPO-13569-1	c35	N75-21600	NASA-CASE-XAC-00001	c15	N71-28952
NASA-CASE-NPO-13569-2	c33	N77-28395	NASA-CASE-XAC-00030	c14	N70-34820
NASA-CASE-NPO-13579-1	c44	N75-28519	NASA-CASE-XAC-00042	c14	N70-34816
NASA-CASE-NPO-13579-2	c44	N77-20565	NASA-CASE-XAC-00048	c02	N71-29128
NASA-CASE-NPO-13579-3	c44	N77-20566	NASA-CASE-XAC-00060	c09	N70-39915
NASA-CASE-NPO-13580-1	c44	N75-28519	NASA-CASE-XAC-00073	c14	N70-34813
NASA-CASE-NPO-13581-2	c44	N77-28584	NASA-CASE-XAC-00074	c15	N70-34817
NASA-CASE-NPO-13587-1	c32	N77-32342	NASA-CASE-XAC-00086	c09	N70-33182
NASA-CASE-NPO-13604-1	c35	N76-31490	NASA-CASE-XAC-00139	c02	N70-34856
NASA-CASE-NPO-13606-1	c35	N75-19627	NASA-CASE-XAC-00319	c25	N70-41628
NASA-CASE-NPO-13613-1	c37	N76-29590	NASA-CASE-XAC-00399	c11	N70-34815
NASA-CASE-NPO-13614-1	c35	N75-19628	NASA-CASE-XAC-00404	c08	N70-40125
NASA-CASE-NPO-13619-1	c37	N75-22748	NASA-CASE-XAC-00405	c05	N70-41819
NASA-CASE-NPO-13620-1	c27	N77-30236	NASA-CASE-XAC-00435	c09	N70-35440
NASA-CASE-NPO-13641-1	c32	N77-24340	NASA-CASE-XAC-00472	c15	N70-40180
NASA-CASE-NPO-13643-1	c52	N76-29896	NASA-CASE-XAC-00648	c14	N70-40400
NASA-CASE-NPO-13644-1	c52	N76-29895	NASA-CASE-XAC-00731	c11	N71-15960
NASA-CASE-NPO-13652-1	c44	N77-28585	NASA-CASE-XAC-00812	c14	N71-15598
NASA-CASE-NPO-13663-1	c35	N77-14406	NASA-CASE-XAC-00942	c10	N71-16042
NASA-CASE-NPO-13666-1	c27	N77-13217	NASA-CASE-XAC-01101	c14	N70-41957
NASA-CASE-NPO-13671-1	c37	N77-31497	NASA-CASE-XAC-01158	c15	N71-23051
NASA-CASE-NPO-13673-1	c71	N77-26919	NASA-CASE-XAC-01404	c05	N70-41581
NASA-CASE-NPO-13675-1	c44	N77-32580	NASA-CASE-XAC-01591	c31	N71-17729
NASA-CASE-NPO-13676-1	c60	N77-24781	NASA-CASE-XAC-01662	c14	N71-23037
NASA-CASE-NPO-13683-1	c35	N77-14411	NASA-CASE-XAC-01677	c09	N71-20816
NASA-CASE-NPO-13687-1	c35	N76-14433	NASA-CASE-XAC-02058	c02	N71-16087
NASA-CASE-NPO-13690-1	c27	N76-13294	NASA-CASE-XAC-02405	c09	N71-16089
NASA-CASE-NPO-13707-1	c74	N77-28933	NASA-CASE-XAC-02407	c14	N69-27423
NASA-CASE-NPO-13722-1	c74	N77-22951	NASA-CASE-XAC-02807	c09	N71-23021
NASA-CASE-NPO-13731-1	c39	N76-17427	NASA-CASE-XAC-02877	c14	N70-41681
NASA-CASE-NPO-13732-1	c44	N77-19581	NASA-CASE-XAC-02970	c14	N69-39896
NASA-CASE-NPO-13734-1	c44	N76-26690	NASA-CASE-XAC-02981	c14	N71-21072
NASA-CASE-NPO-13736-1	c44	N77-32583	NASA-CASE-XAC-03107	c23	N71-16098
NASA-CASE-NPO-13753-1	c32	N77-20289	NASA-CASE-XAC-03392	c03	N70-41954
NASA-CASE-NPO-13756-1	c35	N76-14434	NASA-CASE-XAC-03740	c14	N71-26135
NASA-CASE-NPO-13759-1	c35	N77-11363	NASA-CASE-XAC-03777	c10	N71-15909
NASA-CASE-NPO-13763-1	c37	N77-11398	NASA-CASE-XAC-04030	c10	N71-19472
NASA-CASE-NPO-13764-1	c24	N76-26281	NASA-CASE-XAC-04031	c08	N71-18594
NASA-CASE-NPO-13772-1	c35	N76-26450	NASA-CASE-XAC-04458	c14	N71-24232
NASA-CASE-NPO-13792-1	c35	N77-32455	NASA-CASE-XAC-04865	c14	N71-23790
NASA-CASE-NPO-13798-1	c37	N77-25535	NASA-CASE-XAC-04886-1	c14	N71-20439
NASA-CASE-NPO-13801-1	c36	N76-31514	NASA-CASE-XAC-05333	c11	N71-22875
NASA-CASE-NPO-13802-1	c71	N76-18886	NASA-CASE-XAC-05422	c04	N71-23185
NASA-CASE-NPO-13804-1	c35	N77-19390	NASA-CASE-XAC-05462-2	c10	N72-17171
NASA-CASE-NPO-13808-1	c35	N77-24456	NASA-CASE-XAC-05506-1	c24	N71-16095
NASA-CASE-NPO-13810-1	c44	N77-32582	NASA-CASE-XAC-05632	c32	N71-23971
NASA-CASE-NPO-13812-1	c33	N77-30365	NASA-CASE-XAC-05695	c25	N71-16073
NASA-CASE-NPO-13813-1	c44	N77-19579	NASA-CASE-XAC-05706	c05	N71-12342
NASA-CASE-NPO-13817-1	c44	N77-28583	NASA-CASE-XAC-05902	c11	N71-18578
NASA-CASE-NPO-13821-1	c44	N76-26692	NASA-CASE-XAC-06029-1	c31	N71-24813
NASA-CASE-NPO-13823-1	c37	N77-17466	NASA-CASE-XAC-06302	c08	N71-19763
NASA-CASE-NPO-13832-1	c33	N76-26393	NASA-CASE-XAC-06956	c15	N71-21177

NUMBER INDEX

NASA-CASE-XAC-07043	.....	c05	N71-23161	NASA-CASE-IGS-01513	.....	c03	N71-23336
NASA-CASE-XAC-08494	.....	c30	N71-15990	NASA-CASE-IGS-01537	.....	c07	N71-23405
NASA-CASE-XAC-C8972	.....	c02	N71-20570	NASA-CASE-IGS-01587	.....	c14	N71-15962
NASA-CASE-XAC-C8981	.....	c09	N69-39897	NASA-CASE-IGS-01590	.....	c07	N71-12392
NASA-CASE-XAC-09489-1	.....	c15	N71-26673	NASA-CASE-IGS-01593	.....	c03	N70-35406
NASA-CASE-XAC-10019	.....	c15	N71-23809	NASA-CASE-IGS-01654	.....	c31	N71-24750
NASA-CASE-XAC-10607	.....	c10	N71-23669	NASA-CASE-IGS-01674	.....	c03	N71-29129
NASA-CASE-XAC-10608-1	.....	c09	N71-12517	NASA-CASE-IGS-01725	.....	c14	N69-39982
NASA-CASE-XAC-10768	.....	c09	N71-18830	NASA-CASE-IGS-01784	.....	c10	N71-20782
NASA-CASE-XAC-10770-1	.....	c16	N71-24828	NASA-CASE-IGS-01812	.....	c07	N71-23001
NASA-CASE-XAC-11225	.....	c14	N69-27486	NASA-CASE-IGS-01881	.....	c09	N70-40123
NASA-CASE-XAR-01547	.....	c05	N69-21473	NASA-CASE-IGS-01971	.....	c15	N71-15922
NASA-CASE-XAR-03786	.....	c09	N69-21313	NASA-CASE-IGS-01983	.....	c10	N70-41964
NASA-CASE-XER-07894	.....	c09	N71-18721	NASA-CASE-IGS-02011	.....	c15	N71-20739
NASA-CASE-XER-07895	.....	c26	N72-25679	NASA-CASE-IGS-02171	.....	c09	N69-24324
NASA-CASE-XER-07896-2	.....	c23	N72-22673	NASA-CASE-IGS-02290	.....	c07	N71-28809
NASA-CASE-XER-C6476-1	.....	c26	N72-17820	NASA-CASE-IGS-02317	.....	c15	N71-23525
NASA-CASE-XER-09213	.....	c07	N71-12390	NASA-CASE-IGS-02319	.....	c14	N71-22965
NASA-CASE-XER-09519	.....	c14	N71-18483	NASA-CASE-IGS-02401	.....	c14	N69-27485
NASA-CASE-XER-09521	.....	c09	N72-12136	NASA-CASE-IGS-02422	.....	c15	N71-21529
NASA-CASE-XER-11019	.....	c09	N71-23598	NASA-CASE-IGS-02435	.....	c18	N71-22998
NASA-CASE-XER-11046	.....	c09	N72-22203	NASA-CASE-IGS-02437	.....	c15	N69-21472
NASA-CASE-XER-11046-2	.....	c33	N74-22864	NASA-CASE-IGS-02439	.....	c14	N71-19431
NASA-CASE-XER-11203	.....	c14	N71-28994	NASA-CASE-IGS-02440	.....	c08	N71-19432
NASA-CASE-XFR-00181	.....	c21	N70-33279	NASA-CASE-IGS-02441	.....	c15	N70-41629
NASA-CASE-XFR-00756	.....	c02	N71-13421	NASA-CASE-IGS-02554	.....	c31	N71-21064
NASA-CASE-XFR-00811	.....	c15	N70-36901	NASA-CASE-IGS-02607	.....	c31	N71-21009
NASA-CASE-XFR-00929	.....	c31	N70-34966	NASA-CASE-IGS-02608	.....	c07	N70-41678
NASA-CASE-XFR-02007	.....	c12	N71-24692	NASA-CASE-IGS-02610	.....	c14	N71-23174
NASA-CASE-XFR-03107	.....	c09	N71-19449	NASA-CASE-IGS-02612	.....	c08	N71-19435
NASA-CASE-XFR-03802	.....	c33	N71-23085	NASA-CASE-IGS-02629	.....	c14	N71-21082
NASA-CASE-XFR-04104	.....	c03	N70-42073	NASA-CASE-IGS-02630	.....	c03	N71-22974
NASA-CASE-XFR-04147	.....	c11	N71-10748	NASA-CASE-IGS-02631	.....	c03	N71-23006
NASA-CASE-XFR-05302	.....	c15	N71-23254	NASA-CASE-IGS-02749	.....	c07	N69-39978
NASA-CASE-XFR-05421	.....	c15	N71-22994	NASA-CASE-IGS-02751	.....	c09	N71-23015
NASA-CASE-XFR-05637	.....	c09	N71-19480	NASA-CASE-IGS-02812	.....	c09	N71-19466
NASA-CASE-XFR-07172	.....	c05	N71-27234	NASA-CASE-IGS-02816	.....	c07	N69-24323
NASA-CASE-XFR-07658-1	.....	c05	N71-26293	NASA-CASE-IGS-02884	.....	c15	N71-22705
NASA-CASE-XFR-08403	.....	c05	N71-11202	NASA-CASE-IGS-02889	.....	c07	N71-11282
NASA-CASE-XFR-09479	.....	c14	N69-27503	NASA-CASE-IGS-03058	.....	c10	N71-19547
NASA-CASE-XFR-10856	.....	c05	N71-11189	NASA-CASE-IGS-03095	.....	c09	N69-27463
NASA-CASE-IGS-00131	.....	c09	N70-38995	NASA-CASE-IGS-03120	.....	c15	N71-24047
NASA-CASE-IGS-00174	.....	c08	N70-34743	NASA-CASE-IGS-03230	.....	c14	N71-23401
NASA-CASE-IGS-00260	.....	c31	N70-37924	NASA-CASE-IGS-03303	.....	c08	N71-18595
NASA-CASE-IGS-00359	.....	c14	N70-34159	NASA-CASE-IGS-03304	.....	c09	N71-22988
NASA-CASE-IGS-00373	.....	c23	N71-15978	NASA-CASE-IGS-03351	.....	c31	N71-16081
NASA-CASE-IGS-00381	.....	c09	N70-34819	NASA-CASE-IGS-03390	.....	c03	N71-23187
NASA-CASE-IGS-00458	.....	c09	N70-38604	NASA-CASE-IGS-03427	.....	c10	N71-23029
NASA-CASE-IGS-00466	.....	c21	N70-34297	NASA-CASE-IGS-03429	.....	c03	N69-21330
NASA-CASE-IGS-00473	.....	c03	N70-38713	NASA-CASE-IGS-03431	.....	c21	N71-15642
NASA-CASE-IGS-00587	.....	c15	N70-35087	NASA-CASE-IGS-03501	.....	c09	N71-20864
NASA-CASE-IGS-00619	.....	c30	N70-40016	NASA-CASE-IGS-03502	.....	c10	N71-20852
NASA-CASE-IGS-00689	.....	c08	N70-34787	NASA-CASE-IGS-03505	.....	c03	N71-10608
NASA-CASE-IGS-00740	.....	c07	N71-23098	NASA-CASE-IGS-03532	.....	c14	N71-17627
NASA-CASE-IGS-00769	.....	c14	N70-41647	NASA-CASE-IGS-03556	.....	c27	N70-35534
NASA-CASE-IGS-00783	.....	c30	N71-17788	NASA-CASE-IGS-03632	.....	c09	N71-23311
NASA-CASE-IGS-00809	.....	c21	N70-35427	NASA-CASE-IGS-03644	.....	c16	N71-18614
NASA-CASE-IGS-00823	.....	c10	N71-15910	NASA-CASE-IGS-03736	.....	c14	N72-22443
NASA-CASE-IGS-00824	.....	c15	N71-16078	NASA-CASE-IGS-03864	.....	c15	N69-24320
NASA-CASE-IGS-00886	.....	c03	N71-11053	NASA-CASE-IGS-03865	.....	c14	N69-21363
NASA-CASE-IGS-00938	.....	c32	N70-41367	NASA-CASE-IGS-04047-2	.....	c03	N72-11062
NASA-CASE-IGS-00963	.....	c15	N69-39735	NASA-CASE-IGS-04119	.....	c18	N69-39979
NASA-CASE-IGS-01013	.....	c14	N71-23725	NASA-CASE-IGS-04173	.....	c19	N71-26674
NASA-CASE-IGS-01021	.....	c08	N71-21042	NASA-CASE-IGS-04175	.....	c15	N71-18579
NASA-CASE-IGS-01022	.....	c07	N71-16088	NASA-CASE-IGS-04224	.....	c10	N71-26418
NASA-CASE-IGS-01023	.....	c14	N71-22992	NASA-CASE-IGS-04227	.....	c15	N71-21744
NASA-CASE-IGS-01036	.....	c14	N70-40003	NASA-CASE-IGS-04393	.....	c21	N71-14159
NASA-CASE-IGS-01052	.....	c14	N71-15992	NASA-CASE-IGS-04478	.....	c14	N71-24233
NASA-CASE-IGS-01110	.....	c07	N69-24334	NASA-CASE-IGS-04480	.....	c16	N69-27491
NASA-CASE-IGS-01118	.....	c10	N71-23662	NASA-CASE-IGS-04531	.....	c03	N69-24267
NASA-CASE-IGS-01143	.....	c31	N71-15647	NASA-CASE-IGS-04548	.....	c15	N71-24045
NASA-CASE-IGS-01155	.....	c10	N71-21483	NASA-CASE-IGS-04554	.....	c15	N69-39786
NASA-CASE-IGS-01159	.....	c21	N71-10678	NASA-CASE-IGS-04765	.....	c08	N71-18693
NASA-CASE-IGS-01222	.....	c10	N71-20841	NASA-CASE-IGS-04766	.....	c08	N71-18602
NASA-CASE-IGS-01223	.....	c07	N71-10609	NASA-CASE-IGS-04767	.....	c08	N71-12494
NASA-CASE-IGS-01230	.....	c08	N71-19544	NASA-CASE-IGS-04768	.....	c08	N71-19437
NASA-CASE-IGS-01231	.....	c14	N70-41676	NASA-CASE-IGS-04799	.....	c18	N71-24183
NASA-CASE-IGS-01331	.....	c14	N71-22996	NASA-CASE-IGS-04808	.....	c03	N69-25146
NASA-CASE-IGS-01395	.....	c03	N69-21539	NASA-CASE-IGS-04879	.....	c14	N71-20428
NASA-CASE-IGS-01418	.....	c09	N71-23573	NASA-CASE-IGS-04927	.....	c08	N71-25881
NASA-CASE-IGS-01419	.....	c03	N70-41864	NASA-CASE-IGS-04993	.....	c14	N71-17574
NASA-CASE-IGS-01451	.....	c09	N71-10677	NASA-CASE-IGS-04994	.....	c09	N69-21543
NASA-CASE-IGS-01473	.....	c09	N71-10673	NASA-CASE-IGS-04999	.....	c09	N69-24317
NASA-CASE-IGS-01475	.....	c03	N71-11058	NASA-CASE-IGS-05003	.....	c09	N69-24318
NASA-CASE-IGS-01504	.....	c16	N70-41578	NASA-CASE-IGS-05180	.....	c18	N71-25881
				NASA-CASE-IGS-05211	.....	c07	N69-39980
				NASA-CASE-IGS-05289	.....	c09	N71-19440
				NASA-CASE-IGS-05290	.....	c09	N71-25999
				NASA-CASE-IGS-05291	.....	c23	N71-16381

NUMBER INDEX

NASA-CASE-XGS-05432	.....	c03 N71-19438	NASA-CASE-XLA-00195	.....	c02 N70-38009
NASA-CASE-XGS-05434	.....	c03 N71-20491	NASA-CASE-XLA-00203	.....	c14 N70-34161
NASA-CASE-XGS-05441	.....	c10 N71-22962	NASA-CASE-XLA-00204	.....	c32 N70-36536
NASA-CASE-XGS-05532	.....	c06 N71-17705	NASA-CASE-XLA-00210	.....	c30 N70-40309
NASA-CASE-XGS-05533	.....	c04 N69-27487	NASA-CASE-XLA-00221	.....	c02 N70-33266
NASA-CASE-XGS-05534	.....	c23 N71-16355	NASA-CASE-XLA-00229	.....	c12 N70-33305
NASA-CASE-XGS-05579	.....	c31 N71-15676	NASA-CASE-XLA-00230	.....	c02 N70-33255
NASA-CASE-XGS-05582	.....	c07 N69-27460	NASA-CASE-XLA-00241	.....	c31 N70-37986
NASA-CASE-XGS-05680	.....	c14 N71-17585	NASA-CASE-XLA-00256	.....	c31 N71-15663
NASA-CASE-XGS-05715	.....	c23 N71-16100	NASA-CASE-XLA-00258	.....	c31 N70-38676
NASA-CASE-XGS-05718	.....	c26 N71-16037	NASA-CASE-XLA-00281	.....	c21 N70-36943
NASA-CASE-XGS-05918	.....	c07 N69-39974	NASA-CASE-XLA-00284	.....	c15 N71-16075
NASA-CASE-XGS-06226	.....	c10 N71-25950	NASA-CASE-XLA-00302	.....	c15 N71-16077
NASA-CASE-XGS-06306	.....	c17 N71-16044	NASA-CASE-XLA-00304	.....	c27 N70-34783
NASA-CASE-XGS-06628	.....	c24 N71-16213	NASA-CASE-XLA-00326	.....	c03 N70-34667
NASA-CASE-XGS-07514	.....	c23 N71-16099	NASA-CASE-XLA-00327	.....	c25 N71-29184
NASA-CASE-XGS-07752	.....	c14 N73-30390	NASA-CASE-XLA-00330	.....	c33 N70-34540
NASA-CASE-XGS-07801	.....	c09 N71-12513	NASA-CASE-XLA-00349	.....	c33 N70-37979
NASA-CASE-XGS-07805	.....	c15 N72-33476	NASA-CASE-XLA-00350	.....	c02 N70-38011
NASA-CASE-XGS-08259	.....	c14 N71-23698	NASA-CASE-XLA-00377	.....	c33 N71-17610
NASA-CASE-XGS-08266	.....	c14 N69-27432	NASA-CASE-XLA-00378	.....	c11 N71-15925
NASA-CASE-XGS-08269	.....	c23 N71-26206	NASA-CASE-XLA-00414	.....	c07 N70-38200
NASA-CASE-XGS-08679	.....	c10 N71-21473	NASA-CASE-XLA-00415	.....	c15 N71-16079
NASA-CASE-XGS-08718	.....	c15 N71-24600	NASA-CASE-XLA-00471	.....	c08 N70-34778
NASA-CASE-XGS-08729	.....	c28 N71-14044	NASA-CASE-XLA-00481	.....	c14 N70-36824
NASA-CASE-XGS-09190	.....	c31 N71-16102	NASA-CASE-XLA-00482	.....	c15 N70-36409
NASA-CASE-XGS-10010	.....	c03 N72-15986	NASA-CASE-XLA-00487	.....	c14 N70-40157
NASA-CASE-XGS-10518	.....	c16 N71-28554	NASA-CASE-XLA-00492	.....	c14 N70-34799
NASA-CASE-XGS-11177	.....	c09 N71-27001	NASA-CASE-XLA-00493	.....	c11 N70-34786
			NASA-CASE-XLA-00495	.....	c14 N70-41332
NASA-CASE-XHQ-01208	.....	c15 N70-35409	NASA-CASE-XLA-00670	.....	c08 N71-12501
NASA-CASE-XHQ-01867	.....	c28 N70-35381	NASA-CASE-XLA-00675	.....	c25 N70-33267
NASA-CASE-XHQ-02146	.....	c18 N75-27040	NASA-CASE-XLA-00678	.....	c31 N70-34296
NASA-CASE-XHO-03673	.....	c33 N71-29046	NASA-CASE-XLA-00679	.....	c15 N70-38601
NASA-CASE-XHQ-03903	.....	c15 N69-21922	NASA-CASE-XLA-00686	.....	c31 N70-34135
NASA-CASE-XHQ-04106	.....	c14 N70-40240	NASA-CASE-XLA-00711	.....	c03 N71-12258
			NASA-CASE-XLA-00754	.....	c15 N70-34850
NASA-CASE-XKS-00348	.....	c09 N73-14215	NASA-CASE-XLA-00755	.....	c01 N71-13410
NASA-CASE-XKS-01985	.....	c15 N71-10782	NASA-CASE-XLA-00781	.....	c09 N71-22999
NASA-CASE-XKS-02342	.....	c05 N71-11199	NASA-CASE-XLA-00791	.....	c03 N70-39930
NASA-CASE-XKS-02582	.....	c15 N71-21234	NASA-CASE-XLA-00793	.....	c21 N71-22880
NASA-CASE-XKS-03338	.....	c15 N71-24043	NASA-CASE-XLA-00805	.....	c31 N70-38010
NASA-CASE-XKS-03381	.....	c09 N71-22796	NASA-CASE-XLA-00806	.....	c02 N70-34858
NASA-CASE-XKS-03495	.....	c14 N69-39785	NASA-CASE-XLA-00838	.....	c03 N70-36778
NASA-CASE-XKS-03509	.....	c14 N71-23175	NASA-CASE-XLA-00892	.....	c33 N71-17897
NASA-CASE-XKS-04614	.....	c15 N69-21460	NASA-CASE-XLA-00898	.....	c02 N70-36804
NASA-CASE-XKS-04631	.....	c10 N71-23663	NASA-CASE-XLA-00907	.....	c07 N71-10775
NASA-CASE-XKS-05932	.....	c09 N71-26787	NASA-CASE-XLA-00934	.....	c14 N71-22765
NASA-CASE-XKS-06167	.....	c08 N71-24890	NASA-CASE-XLA-00936	.....	c14 N71-14996
NASA-CASE-XKS-06250	.....	c14 N71-15600	NASA-CASE-XLA-00937	.....	c31 N71-17691
NASA-CASE-XKS-07814	.....	c15 N71-27067	NASA-CASE-XLA-00939	.....	c11 N71-15926
NASA-CASE-XKS-07953	.....	c15 N71-26134	NASA-CASE-XLA-00941	.....	c14 N71-23240
NASA-CASE-XKS-08012-2	.....	c31 N71-15566	NASA-CASE-XLA-01019	.....	c15 N70-40156
NASA-CASE-XKS-08485	.....	c07 N71-19493	NASA-CASE-XLA-01027	.....	c31 N71-24035
NASA-CASE-XKS-09340	.....	c07 N71-24614	NASA-CASE-XLA-01043	.....	c28 N71-10780
NASA-CASE-XKS-09348	.....	c09 N71-13521	NASA-CASE-XLA-01090	.....	c07 N71-12389
NASA-CASE-XKS-10543	.....	c07 N71-26292	NASA-CASE-XLA-01090	.....	c16 N71-28963
NASA-CASE-XKS-10804	.....	c05 N71-24606	NASA-CASE-XLA-01091	.....	c15 N71-10672
			NASA-CASE-XLA-01127	.....	c07 N70-41372
NASA-CASE-XLA-1349	.....	c20 N77-17143	NASA-CASE-XLA-01131	.....	c14 N71-10774
NASA-CASE-XLA-8914	.....	c15 N73-12492	NASA-CASE-XLA-01141	.....	c15 N71-13789
NASA-CASE-XLA-8914-2	.....	c34 N76-23522	NASA-CASE-XLA-01163	.....	c21 N71-15582
NASA-CASE-XLA-00013	.....	c15 N71-29136	NASA-CASE-XLA-01219	.....	c10 N71-23084
NASA-CASE-XLA-00062	.....	c14 N70-33254	NASA-CASE-XLA-01220	.....	c02 N70-41863
NASA-CASE-XLA-00067	.....	c02 N70-33332	NASA-CASE-XLA-01243	.....	c33 N71-22792
NASA-CASE-XLA-00100	.....	c14 N70-36807	NASA-CASE-XLA-01262	.....	c15 N71-21404
NASA-CASE-XLA-00105	.....	c28 N70-33331	NASA-CASE-XLA-01268	.....	c09 N69-21470
NASA-CASE-XLA-00112	.....	c11 N70-33287	NASA-CASE-XLA-01290	.....	c02 N70-42016
NASA-CASE-XLA-00113	.....	c14 N70-33386	NASA-CASE-XLA-01291	.....	c33 N70-36617
NASA-CASE-XLA-00115	.....	c03 N70-33343	NASA-CASE-XLA-01326	.....	c11 N71-21481
NASA-CASE-XLA-00117	.....	c31 N71-17680	NASA-CASE-XLA-01332	.....	c31 N71-15664
NASA-CASE-XLA-00118	.....	c05 N70-33285	NASA-CASE-XLA-01339	.....	c31 N71-15692
NASA-CASE-XLA-00119	.....	c11 N70-33329	NASA-CASE-XLA-01353	.....	c14 N70-41366
NASA-CASE-XLA-00120	.....	c21 N70-33181	NASA-CASE-XLA-01354	.....	c25 N70-36946
NASA-CASE-XLA-00128	.....	c15 N70-37925	NASA-CASE-XLA-01396	.....	c03 N71-12259
NASA-CASE-XLA-00135	.....	c14 N70-33322	NASA-CASE-XLA-01400	.....	c07 N70-41331
NASA-CASE-XLA-00137	.....	c15 N70-33180	NASA-CASE-XLA-01401	.....	c15 N71-21179
NASA-CASE-XLA-00138	.....	c31 N70-37981	NASA-CASE-XLA-01441	.....	c15 N70-41679
NASA-CASE-XLA-00141	.....	c09 N70-33312	NASA-CASE-XLA-01446	.....	c15 N71-21528
NASA-CASE-XLA-00142	.....	c02 N70-33286	NASA-CASE-XLA-01486	.....	c01 N71-23497
NASA-CASE-XLA-00147	.....	c25 N70-34661	NASA-CASE-XLA-01494	.....	c15 N71-24164
NASA-CASE-XLA-00149	.....	c31 N70-37938	NASA-CASE-XLA-01530	.....	c14 N71-23092
NASA-CASE-XLA-00154	.....	c28 N70-33374	NASA-CASE-XLA-01551	.....	c14 N71-22989
NASA-CASE-XLA-00158	.....	c26 N70-36805	NASA-CASE-XLA-01552	.....	c07 N71-11284
NASA-CASE-XLA-00165	.....	c31 N70-33242	NASA-CASE-XLA-01583	.....	c02 N70-36825
NASA-CASE-XLA-00166	.....	c02 N70-34178	NASA-CASE-XLA-01584	.....	c14 N71-23269
NASA-CASE-XLA-00183	.....	c14 N70-40239	NASA-CASE-XLA-01731	.....	c32 N71-21045
NASA-CASE-XLA-00188	.....	c15 N71-22874	NASA-CASE-XLA-01745	.....	c33 N71-28903
NASA-CASE-XLA-00189	.....	c33 N70-36846	NASA-CASE-XLA-01781	.....	c14 N69-39975

NUMBER INDEX

NASA-CASP-XLA-01782	c14	N71-26136	NASA-CASE-XLA-05966	c15	N72-12408
NASA-CASE-XLA-01787	c11	N71-16028	NASA-CASE-XLA-06095	c01	N69-39981
NASA-CASP-XLA-01791	c14	N71-22991	NASA-CASE-XLA-06199	c15	N71-24875
NASA-CASE-XLA-01794	c33	N71-21586	NASA-CASE-XLA-06232	c25	N71-20563
NASA-CASE-XLA-01804	c02	N70-34160	NASA-CASE-XLA-06339	c02	N71-13422
NASA-CASE-XLA-01807	c15	N71-10799	NASA-CASE-XLA-06683	c14	N72-28436
NASA-CASE-XLA-01808	c15	N71-20740	NASA-CASE-XLA-06713	c14	N71-28991
NASA-CASP-XLA-01832	c14	N71-21006	NASA-CASE-XLA-06824-2	c02	N71-11037
NASA-CASE-XLA-01907	c14	N71-23268	NASA-CASE-XLA-06958	c02	N71-11038
NASA-CASP-XLA-01926	c14	N71-15620	NASA-CASE-XLA-07390	c15	N71-18616
NASA-CASE-XLA-01952	c08	N71-12507	NASA-CASE-XLA-07391	c12	N71-17579
NASA-CASE-XLA-01967	c31	N70-42015	NASA-CASE-XLA-07424	c14	N71-18482
NASA-CASE-XLA-01987	c23	N71-23976	NASA-CASE-XLA-07430	c11	N72-22246
NASA-CASE-XLA-01989	c21	N70-34295	NASA-CASE-XLA-07473	c15	N71-24895
NASA-CASE-XLA-01995	c18	N71-23047	NASA-CASE-XLA-07497	c09	N71-12514
NASA-CASE-XLA-02050	c31	N71-22968	NASA-CASE-XLA-07728	c33	N72-22890
NASA-CASE-XLA-02057	c26	N70-40015	NASA-CASE-XLA-07732	c08	N71-18751
NASA-CASE-XLA-02059	c33	N71-24276	NASA-CASE-XLA-07788	c09	N71-29139
NASA-CASE-XLA-02079	c12	N71-16894	NASA-CASE-XLA-07813	c14	N72-17328
NASA-CASE-XLA-02081	c20	N71-16281	NASA-CASE-XLA-07828	c08	N71-27057
NASA-CASE-XLA-02131	c32	N70-42003	NASA-CASE-XLA-07829	c15	N72-16329
NASA-CASE-XLA-02132	c31	N71-10582	NASA-CASE-XLA-07911	c15	N71-15571
NASA-CASE-XLA-02332	c32	N71-17609	NASA-CASE-XLA-08254	c14	N71-26161
NASA-CASE-XLA-02551	c21	N71-21708	NASA-CASE-XLA-08491	c05	N69-21380
NASA-CASE-XLA-02605	c14	N71-10773	NASA-CASE-XLA-08493	c10	N71-19421
NASA-CASE-XLA-02609	c09	N72-25256	NASA-CASE-XLA-08507	c09	N69-39984
NASA-CASE-XLA-02619	c10	N71-26334	NASA-CASE-XLA-08530	c32	N71-25360
NASA-CASE-XLA-02651	c28	N70-41967	NASA-CASE-XLA-08645	c15	N69-21465
NASA-CASE-XLA-02704	c11	N69-21540	NASA-CASE-XLA-08646	c14	N71-17586
NASA-CASE-XLA-02705	c08	N71-15908	NASA-CASE-XLA-08799	c10	N71-27272
NASA-CASE-XLA-02758	c14	N71-18481	NASA-CASE-XLA-08801-1	c02	N71-11043
NASA-CASE-XLA-02809	c15	N71-22982	NASA-CASE-XLA-08802	c06	N71-11238
NASA-CASP-XLA-02810	c14	N71-25901	NASA-CASE-XLA-08911	c15	N71-27214
NASA-CASE-XLA-02850	c09	N71-20447	NASA-CASE-XLA-08913	c14	N71-28933
NASA-CASE-XLA-02854	c15	N69-27490	NASA-CASE-XLA-08916	c15	N71-29018
NASA-CASE-XLA-02865	c28	N71-15563	NASA-CASE-XLA-08966-1	c17	N71-25903
NASA-CASE-XLA-03076	c07	N71-11266	NASA-CASE-XLA-08967	c02	N71-27088
NASA-CASE-XLA-03102	c14	N71-21079	NASA-CASE-XLA-09122	c15	N69-27505
NASA-CASE-XLA-03103	c25	N71-21693	NASA-CASE-XLA-09346	c15	N71-28740
NASA-CASE-XLA-03104	c06	N71-11235	NASA-CASE-XLA-09371	c10	N71-18724
NASA-CASE-XLA-03105	c15	N69-27483	NASA-CASE-XLA-09480	c11	N71-33612
NASA-CASE-XLA-03114	c09	N71-22888	NASA-CASE-XLA-09843	c15	N72-27485
NASA-CASE-XLA-03127	c11	N71-10776	NASA-CASE-XLA-09881	c31	N71-16085
NASA-CASE-XLA-03132	c31	N71-22969	NASA-CASE-XLA-10322	c15	N72-17452
NASA-CASE-XLA-03135	c32	N71-16428	NASA-CASE-XLA-10402	c14	N71-29041
NASA-CASE-XLA-03213	c05	N71-11207	NASA-CASE-XLA-10450	c28	N71-21493
NASA-CASE-XLA-03271	c11	N69-24321	NASA-CASE-XLA-10470	c15	N72-21489
NASA-CASE-XLA-03273	c14	N71-18699	NASA-CASE-XLA-10772	c07	N71-28980
NASA-CASE-XLA-03356	c10	N71-23315	NASA-CASE-XLA-11028-1	c24	N74-27035
NASA-CASE-XLA-03374	c25	N71-15562	NASA-CASE-XLA-11154	c07	N72-21117
NASA-CASE-XLA-03375	c16	N71-24074	NASA-CASE-XLA-11189	c10	N72-20222
NASA-CASE-XLA-03410	c16	N71-25914	NASA-CASE-XLE-2529-2	c36	N75-27364
NASA-CASE-XLA-03492	c15	N71-22713	NASA-CASE-XLE-2529-3	c33	N74-20859
NASA-CASE-XLA-03497	c15	N71-23052	NASA-CASE-XLE-00005	c28	N70-39899
NASA-CASE-XLA-03538	c15	N71-24897	NASA-CASE-XLE-00010	c15	N70-33382
NASA-CASE-XLA-03645	c14	N71-20430	NASA-CASE-XLE-00011	c14	N70-41946
NASA-CASE-XLA-03659	c02	N71-11041	NASA-CASE-XLE-00020	c15	N70-33226
NASA-CASE-XLA-03660	c15	N71-21060	NASA-CASE-XLE-00023	c15	N70-33330
NASA-CASE-XLA-03661	c15	N71-33518	NASA-CASE-XLE-00027	c33	N71-29152
NASA-CASE-XLA-03691	c31	N71-15674	NASA-CASE-XLE-00035	c33	N71-29151
NASA-CASE-XLA-03724	c14	N69-27461	NASA-CASE-XLE-00037	c28	N70-33372
NASA-CASE-XLA-03893	c10	N71-27271	NASA-CASE-XLE-00046	c15	N71-33311
NASA-CASE-XLA-04063	c31	N71-33160	NASA-CASE-XLE-00057	c28	N70-38711
NASA-CASE-XLA-04126	c28	N71-26779	NASA-CASE-XLE-00078	c28	N70-33284
NASA-CASE-XLA-04143	c15	N71-17687	NASA-CASE-XLE-00085	c28	N70-39895
NASA-CASE-XLA-04251	c18	N71-26100	NASA-CASE-XLE-00092	c15	N70-33264
NASA-CASE-XLA-04295	c16	N71-24170	NASA-CASE-XLE-00101	c15	N70-33376
NASA-CASE-XLA-04451	c02	N71-12243	NASA-CASE-XLE-00103	c28	N70-33241
NASA-CASE-XLA-04555-1	c14	N71-25892	NASA-CASE-XLE-00106	c15	N71-16076
NASA-CASE-XLA-04556	c14	N69-27484	NASA-CASE-XLE-00111	c28	N70-38199
NASA-CASE-XLA-04605	c32	N71-16106	NASA-CASE-XLE-00143	c14	N70-36618
NASA-CASE-XLA-04622	c03	N70-41580	NASA-CASE-XLE-00144	c28	N70-34860
NASA-CASE-XLA-04804	c31	N71-23008	NASA-CASE-XLE-00145	c28	N70-41818
NASA-CASE-XLA-04857	c15	N72-22482	NASA-CASE-XLE-00150	c17	N70-33283
NASA-CASE-XLA-04901	c31	N71-24315	NASA-CASE-XLE-00151	c28	N71-29154
NASA-CASE-XLA-04980	c09	N69-27422	NASA-CASE-XLE-00155	c15	N70-36411
NASA-CASE-XLA-04980-2	c14	N72-28438	NASA-CASE-XLE-00164	c11	N70-33278
NASA-CASE-XLA-05056	c15	N72-11389	NASA-CASE-XLE-00168	c15	N70-36412
NASA-CASE-XLA-05087	c14	N73-30391	NASA-CASE-XLE-00177	c28	N70-40367
NASA-CASE-XLA-05099	c09	N73-13209	NASA-CASE-XLE-00207	c28	N70-33375
NASA-CASE-XLA-05100	c15	N71-17696	NASA-CASE-XLE-00208	c28	N70-34294
NASA-CASE-XLA-05332	c05	N71-11194	NASA-CASE-XLE-00209	c22	N73-32528
NASA-CASE-XLA-05369	c31	N71-15687	NASA-CASE-XLE-00212	c03	N70-34134
NASA-CASE-XLA-05378	c11	N71-21475	NASA-CASE-XLE-00222	c02	N70-37939
NASA-CASE-XLA-05464	c21	N71-14132	NASA-CASE-XLE-00228	c17	N70-38490
NASA-CASE-XLA-05541	c12	N71-26387	NASA-CASE-XLE-00231	c17	N70-38198
NASA-CASE-XLA-05749	c15	N71-19569	NASA-CASE-XLE-00243	c14	N70-38602
NASA-CASE-XLA-05828	c01	N71-13411			
NASA-CASE-XLA-05906	c31	N71-16221			

NUMBER INDEX

NASA-CASE-XLF-00252	c11	N70-34844	NASA-CASE-XLE-03280	c14	N71-23093
NASA-CASE-XLF-00266	c14	N70-34156	NASA-CASE-XLE-03307	c33	N71-14035
NASA-CASE-XLF-00267	c28	N70-33356	NASA-CASE-XLE-03432	c33	N71-24145
NASA-CASE-XLF-00283	c17	N70-36616	NASA-CASE-XLE-03494	c27	N71-21819
NASA-CASE-XLF-00288	c15	N70-34247	NASA-CASE-XLE-03512	c12	N69-21466
NASA-CASE-XLF-00298	c22	N70-34501	NASA-CASE-XLE-03583	c31	N71-17629
NASA-CASE-XLF-00301	c14	N70-36808	NASA-CASE-XLE-03629	c17	N71-23248
NASA-CASE-XLF-00303	c15	N70-36535	NASA-CASE-XLE-03778	c09	N69-21542
NASA-CASE-XLF-00321	c22	N70-34572	NASA-CASE-XLE-03803	c15	N71-23816
NASA-CASE-XLF-00323	c28	N70-38505	NASA-CASE-XLE-03803-2	c15	N71-17651
NASA-CASE-XLF-00335	c14	N70-35368	NASA-CASE-XLE-03804	c10	N71-19471
NASA-CASE-XLF-00342	c28	N70-37980	NASA-CASE-XLE-03925	c18	N71-22894
NASA-CASE-XLF-00345	c15	N70-38020	NASA-CASE-XLE-03940	c18	N71-26153
NASA-CASE-XLF-00353	c18	N70-39897	NASA-CASE-XLE-03940-2	c17	N72-28536
NASA-CASE-XLF-00376	c28	N70-37245	NASA-CASE-XLE-04026	c14	N71-23267
NASA-CASE-XLF-00387	c33	N70-34812	NASA-CASE-XLE-04222	c23	N71-22881
NASA-CASE-XLF-00388	c28	N70-34788	NASA-CASE-XLE-04250	c09	N71-20446
NASA-CASE-XLF-00397	c15	N70-36492	NASA-CASE-XLE-04501	c09	N71-23190
NASA-CASE-XLF-00409	c28	N71-15658	NASA-CASE-XLE-04503	c14	N71-24864
NASA-CASE-XLF-00454	c23	N71-17802	NASA-CASE-XLE-04526	c03	N71-11052
NASA-CASE-XLF-00455	c28	N70-38197	NASA-CASE-XLE-04535	c03	N71-23354
NASA-CASE-XLF-00490	c33	N70-34545	NASA-CASE-XLE-04599	c22	N72-20597
NASA-CASE-XLF-00503	c14	N70-34818	NASA-CASE-XLE-04603	c33	N71-21507
NASA-CASE-XLF-00519	c28	N70-41576	NASA-CASE-XLE-04677	c15	N71-10577
NASA-CASE-XLF-00586	c15	N71-15968	NASA-CASE-XLE-04787	c03	N71-20492
NASA-CASE-XLF-00620	c32	N70-41579	NASA-CASE-XLE-04788	c09	N71-22987
NASA-CASE-XLF-00660	c28	N70-39925	NASA-CASE-XLE-04791	c32	N74-22096
NASA-CASE-XLF-00685	c28	N70-41992	NASA-CASE-XLE-04857	c28	N71-23968
NASA-CASE-XLF-00688	c14	N70-41330	NASA-CASE-XLE-04946	c17	N71-24911
NASA-CASE-XLF-00690	c25	N69-39884	NASA-CASE-XLE-05033	c15	N71-23810
NASA-CASE-XLF-00702	c14	N70-40203	NASA-CASE-XLE-05079	c15	N71-17652
NASA-CASE-XLF-00703	c15	N71-15967	NASA-CASE-XLE-05130	c15	N69-21362
NASA-CASE-XLF-00715	c15	N70-34859	NASA-CASE-XLE-05130-2	c15	N71-19570
NASA-CASE-XLF-00720	c14	N70-40201	NASA-CASE-XLE-05230	c14	N72-27410
NASA-CASE-XLF-00724	c14	N70-34669	NASA-CASE-XLE-05230-2	c14	N73-13417
NASA-CASE-XLF-00726	c17	N71-15644	NASA-CASE-XLE-05260	c14	N71-20429
NASA-CASE-XLF-00785	c33	N71-16104	NASA-CASE-XLE-05641-1	c15	N71-26346
NASA-CASE-XLF-00787	c14	N71-21090	NASA-CASE-XLE-05689	c28	N71-15659
NASA-CASE-XLF-00808	c24	N71-10560	NASA-CASE-XLE-05913	c33	N71-14032
NASA-CASE-XLF-00810	c15	N70-34861	NASA-CASE-XLE-06461	c17	N72-22530
NASA-CASE-XLF-00815	c15	N70-35407	NASA-CASE-XLE-06461-2	c17	N72-28535
NASA-CASE-XLF-00817	c28	N70-33265	NASA-CASE-XLE-06773	c15	N71-23817
NASA-CASE-XLF-00818	c22	N70-34248	NASA-CASE-XLE-06774-2	c06	N72-25150
NASA-CASE-XLF-00820	c14	N71-16014	NASA-CASE-XLE-06969	c17	N71-24142
NASA-CASE-XLF-00821	c25	N71-15650	NASA-CASE-XLE-07087	c06	N69-39889
NASA-CASE-XLF-00953	c15	N71-15966	NASA-CASE-XLE-08511	c18	N71-23710
NASA-CASE-XLF-01015	c03	N69-39898	NASA-CASE-XLE-08511-2	c18	N71-16105
NASA-CASE-XLF-01092	c15	N71-22797	NASA-CASE-XLE-08569	c03	N71-23449
NASA-CASE-XLF-01124	c28	N71-14043	NASA-CASE-XLE-08569-2	c03	N71-24681
NASA-CASE-XLF-01182	c27	N71-15635	NASA-CASE-XLE-08917	c15	N71-15597
NASA-CASE-XLF-01246	c14	N71-10797	NASA-CASE-XLE-08917-2	c15	N71-24836
NASA-CASE-XLF-01300	c15	N70-41993	NASA-CASE-XLE-09341	c12	N71-28741
NASA-CASE-XLF-01399	c33	N71-15625	NASA-CASE-XLE-09475-1	c33	N71-15568
NASA-CASE-XLF-01449	c15	N70-41646	NASA-CASE-XLE-09527	c15	N71-17688
NASA-CASE-XLF-01481	c14	N71-10781	NASA-CASE-XLE-09527-2	c15	N71-26189
NASA-CASE-XLF-01512	c12	N70-40124	NASA-CASE-XLE-10326-2	c15	N72-29488
NASA-CASE-XLF-01533	c11	N71-10777	NASA-CASE-XLE-10326-4	c37	N74-15125
NASA-CASE-XLF-01604-2	c15	N71-15610	NASA-CASE-XLE-10337	c15	N71-24046
NASA-CASE-XLF-01609	c14	N71-10500	NASA-CASE-XLE-10453-2	c28	N73-27699
NASA-CASE-XLF-01640	c31	N71-15637	NASA-CASE-XLE-10466	c17	N69-25147
NASA-CASE-XLF-01645	c03	N71-20904	NASA-CASE-XLE-10529	c14	N69-23191
NASA-CASE-XLF-01716	c09	N70-40234	NASA-CASE-XLE-10715	c26	N71-23292
NASA-CASE-XLF-01765	c18	N71-10772	NASA-CASE-XLE-10717	c37	N75-29426
NASA-CASE-XLF-01783	c28	N70-34175	NASA-CASE-XLE-10910	c18	N71-29040
NASA-CASE-XLF-01902	c28	N71-10574	NASA-CASE-XLE-103477-1	c28	N71-20330
NASA-CASE-XLF-01903	c22	N71-23599			
NASA-CASE-XLF-01988	c27	N71-15634	NASA-CASE-XMF-00148	c28	N70-38710
NASA-CASE-XLF-01997	c06	N71-23527	NASA-CASE-XMF-00185	c21	N70-34539
NASA-CASE-XLF-02008	c09	N71-21583	NASA-CASE-XMF-00324	c09	N70-34596
NASA-CASE-XLF-02024	c14	N71-22964	NASA-CASE-XMF-00339	c15	N70-39896
NASA-CASE-XLF-02038	c09	N71-16086	NASA-CASE-XMF-00341	c15	N70-33323
NASA-CASE-XLF-02066	c28	N71-15661	NASA-CASE-XMF-00369	c09	N70-36494
NASA-CASE-XLF-02082	c17	N71-16026	NASA-CASE-XMF-00375	c15	N70-34249
NASA-CASE-XLF-02083	c03	N69-39983	NASA-CASE-XMF-00389	c31	N70-34176
NASA-CASE-XLF-02428	c17	N70-33288	NASA-CASE-XMF-00392	c15	N70-34814
NASA-CASE-XLF-02531	c05	N71-23080	NASA-CASE-XMF-00411	c11	N70-36913
NASA-CASE-XLF-02578	c25	N71-20747	NASA-CASE-XMF-00421	c09	N70-39502
NASA-CASE-XLF-02624	c12	N69-39988	NASA-CASE-XMF-00424	c11	N70-38196
NASA-CASE-XLF-02647	c18	N71-23658	NASA-CASE-XMF-00437	c07	N70-40202
NASA-CASE-XLF-02792	c26	N71-10607	NASA-CASE-XMF-00442	c31	N71-10747
NASA-CASE-XLF-02798	c26	N71-23654	NASA-CASE-XMF-00447	c14	N70-33179
NASA-CASE-XLF-02823	c09	N71-23443	NASA-CASE-XMF-00456	c14	N70-34705
NASA-CASE-XLF-02824	c03	N69-39890	NASA-CASE-XMF-00462	c14	N70-34298
NASA-CASE-XLF-02902	c25	N71-21694	NASA-CASE-XMF-00479	c14	N70-34794
NASA-CASE-XLF-02991	c17	N71-16025	NASA-CASE-XMF-00480	c14	N70-39898
NASA-CASE-XLF-02998	c14	N70-42074	NASA-CASE-XMF-00515	c15	N70-34664
NASA-CASE-XLF-02999	c15	N71-16052	NASA-CASE-XMF-00517	c03	N70-34157
NASA-CASE-XLF-03061-1	c10	N71-24798	NASA-CASE-XMF-00580	c11	N70-35383
NASA-CASE-XLF-03157	c28	N71-24736	NASA-CASE-XMF-00640	c15	N70-39924

NUMBER INDEX

NASA-CASE-XMF-00641	c31	N70-36410	NASA-CASE-XMF-05114-3	c15	N71-24865
NASA-CASE-XMF-00658	c12	N70-38997	NASA-CASE-XMF-05195	c10	N71-24861
NASA-CASE-XMF-00663	c08	N71-18752	NASA-CASE-XMF-05224	c14	N71-23726
NASA-CASE-XMF-00684	c21	N71-21688	NASA-CASE-XMF-05279	c18	N71-16124
NASA-CASE-XMF-00701	c09	N70-40272	NASA-CASE-XMF-05344	c31	N71-16345
NASA-CASE-XMF-00722	c15	N70-40204	NASA-CASE-XMF-05835	c08	N71-12504
NASA-CASE-XMF-00906	c09	N70-41655	NASA-CASE-XMF-05843	c03	N71-11055
NASA-CASE-XMF-00908	c14	N70-40238	NASA-CASE-XMF-05844	c14	N71-17587
NASA-CASE-XMF-00923	c28	N70-36802	NASA-CASE-XMF-05868	c26	N75-27125
NASA-CASE-XMF-00968	c28	N71-15660	NASA-CASE-XMF-05882	c35	N75-27329
NASA-CASE-XMF-01016	c26	N71-17818	NASA-CASE-XMF-05941	c31	N71-24912
NASA-CASE-XMF-01030	c18	N70-41583	NASA-CASE-XMF-05999	c15	N71-29032
NASA-CASE-XMF-01045	c15	N70-40354	NASA-CASE-XMF-06053	c26	N75-27126
NASA-CASE-XMF-01049	c15	N71-23049	NASA-CASE-XMF-06065	c15	N71-20395
NASA-CASE-XMF-01083	c15	N71-22723	NASA-CASE-XMF-06092	c07	N71-24612
NASA-CASE-XMF-01096	c10	N71-16030	NASA-CASE-XMF-06409	c06	N71-23230
NASA-CASE-XMF-01097	c10	N71-16058	NASA-CASE-XMF-06515	c14	N71-24227
NASA-CASE-XMF-01059	c14	N71-15969	NASA-CASE-XMF-06519	c09	N71-12519
NASA-CASE-XMF-01129	c09	N70-38712	NASA-CASE-XMF-06531	c14	N71-17575
NASA-CASE-XMF-01160	c07	N71-11298	NASA-CASE-XMF-06589	c05	N71-23159
NASA-CASE-XMF-01174	c02	N70-41589	NASA-CASE-XMF-06617	c09	N71-24843
NASA-CASE-XMF-01371	c15	N70-41829	NASA-CASE-XMF-06888	c15	N71-24044
NASA-CASE-XMF-01402	c18	N71-21651	NASA-CASE-XMF-06892	c09	N71-24805
NASA-CASE-XMF-01452	c15	N70-41371	NASA-CASE-XMF-06926	c28	N71-22983
NASA-CASE-XMF-01483	c14	N69-27431	NASA-CASE-XMF-07069	c15	N71-23815
NASA-CASE-XMF-01543	c31	N71-17730	NASA-CASE-XMF-07488	c11	N71-18773
NASA-CASE-XMF-01544	c28	N70-34162	NASA-CASE-XMF-07587	c15	N71-18701
NASA-CASE-XMF-01598	c21	N71-15583	NASA-CASE-XMF-07770-2	c18	N71-26772
NASA-CASE-XMF-01599	c09	N71-20705	NASA-CASE-XMF-07808	c15	N71-23812
NASA-CASE-XMF-01667	c15	N71-17647	NASA-CASE-XMF-08217	c03	N71-23229
NASA-CASE-XMF-01669	c21	N71-23289	NASA-CASE-XMF-08522	c15	N71-19486
NASA-CASE-XMF-01720	c15	N71-23050	NASA-CASE-XMF-08523	c31	N71-20396
NASA-CASE-XMF-01772	c11	N70-41677	NASA-CASE-XMF-08651	c06	N71-11236
NASA-CASE-XMF-01779	c12	N71-20815	NASA-CASE-XMF-08652	c06	N71-11243
NASA-CASE-XMF-01813	c28	N70-41582	NASA-CASE-XMF-08655	c06	N71-11239
NASA-CASE-XMF-01887	c15	N71-10617	NASA-CASE-XMF-08656	c06	N71-11242
NASA-CASE-XMF-01892	c10	N71-22986	NASA-CASE-XMF-08665	c10	N71-19467
NASA-CASE-XMF-01899	c31	N70-41948	NASA-CASE-XMF-08674	c09	N71-28807
NASA-CASE-XMF-01973	c31	N70-41588	NASA-CASE-XMF-08804	c06	N71-24717
NASA-CASE-XMF-01974	c14	N71-22752	NASA-CASE-XMF-09422	c07	N71-19436
NASA-CASE-XMF-02039	c15	N71-15871	NASA-CASE-XMF-09902	c15	N72-11387
NASA-CASE-XMF-02107	c15	N71-10809	NASA-CASE-XMF-10040	c15	N71-22877
NASA-CASE-XMF-02108	c31	N70-36845	NASA-CASE-XMF-10289	c14	N71-23699
NASA-CASE-XMF-02221	c18	N71-27170	NASA-CASE-XMF-10753	c06	N71-11237
NASA-CASE-XMF-02263	c05	N74-10907	NASA-CASE-XMF-10968	c14	N71-24234
NASA-CASE-XMF-02303	c17	N71-23828	NASA-CASE-XMF-14032	c20	N71-16340
NASA-CASE-XMF-02307	c14	N71-10779	NASA-CASE-XMF-14301	c09	N71-23188
NASA-CASE-XMF-02330	c15	N71-23798			
NASA-CASE-XMF-02392	c32	N71-24285	NASA-CASE-XMS-00259	c18	N70-36400
NASA-CASE-XMF-02433	c14	N71-10616	NASA-CASE-XMS-00370	c17	N71-20941
NASA-CASE-XMF-02584	c06	N71-20905	NASA-CASE-XMS-00486	c33	N70-33344
NASA-CASE-XMF-02786	c17	N71-20743	NASA-CASE-XMS-00583	c28	N70-38504
NASA-CASE-XMF-02822	c14	N70-41994	NASA-CASE-XMS-00784	c05	N71-12435
NASA-CASE-XMF-02853	c31	N70-36654	NASA-CASE-XMS-00864	c05	N70-36493
NASA-CASE-XMF-02964	c14	N71-17659	NASA-CASE-XMS-00893	c07	N70-40063
NASA-CASE-XMF-02966	c10	N71-24863	NASA-CASE-XMS-00907	c02	N70-41630
NASA-CASE-XMF-03074	c06	N71-24740	NASA-CASE-XMS-00913	c10	N71-23543
NASA-CASE-XMF-03169	c31	N71-15675	NASA-CASE-XMS-00945	c09	N71-10798
NASA-CASE-XMF-03198	c30	N70-40353	NASA-CASE-XMS-01108	c15	N69-24322
NASA-CASE-XMF-03212	c15	N71-22721	NASA-CASE-XMS-01115	c05	N70-39922
NASA-CASE-XMF-03248	c11	N71-10604	NASA-CASE-XMS-01177	c05	N71-19440
NASA-CASE-XMF-03287	c15	N71-15607	NASA-CASE-XMS-01240	c05	N70-35152
NASA-CASE-XMF-03290	c15	N71-23256	NASA-CASE-XMS-01315	c09	N70-41675
NASA-CASE-XMF-03498	c15	N71-15986	NASA-CASE-XMS-01330	c37	N75-27376
NASA-CASE-XMF-03511	c15	N71-22799	NASA-CASE-XMS-01445	c12	N71-16031
NASA-CASE-XMF-03753	c15	N71-24833	NASA-CASE-XMS-01492	c05	N70-41297
NASA-CASE-XMF-03844-1	c14	N71-26474	NASA-CASE-XMS-01546	c14	N70-40233
NASA-CASE-XMF-03856	c31	N70-34159	NASA-CASE-XMS-01554	c10	N71-10578
NASA-CASE-XMF-03873	c06	N69-39733	NASA-CASE-XMS-01615	c05	N70-41325
NASA-CASE-XMF-03934	c09	N71-22985	NASA-CASE-XMS-01618	c14	N71-20741
NASA-CASE-XMF-03968	c14	N71-27186	NASA-CASE-XMS-01620	c23	N71-15673
NASA-CASE-XMF-03988	c15	N71-21403	NASA-CASE-XMS-01624	c15	N70-40062
NASA-CASE-XMF-04042	c15	N71-23023	NASA-CASE-XMS-01625	c15	N71-23022
NASA-CASE-XMF-04132	c15	N69-27502	NASA-CASE-XMS-01816	c33	N71-15623
NASA-CASE-XMF-04133	c06	N71-20717	NASA-CASE-XMS-01905	c12	N71-21089
NASA-CASE-XMF-04134	c14	N71-23755	NASA-CASE-XMS-01906	c31	N70-41373
NASA-CASE-XMF-04163	c02	N71-23007	NASA-CASE-XMS-01991	c09	N71-21449
NASA-CASE-XMF-04208	c33	N71-29051	NASA-CASE-XMS-01994-1	c14	N72-17326
NASA-CASE-XMF-04237	c33	N71-16278	NASA-CASE-XMS-02009	c33	N71-20834
NASA-CASE-XMF-04238	c09	N69-39734	NASA-CASE-XMS-02063	c03	N71-29044
NASA-CASE-XMF-04367	c09	N71-23545	NASA-CASE-XMS-02087	c09	N70-41717
NASA-CASE-XMF-04415	c14	N71-24693	NASA-CASE-XMS-02159	c10	N71-22961
NASA-CASE-XMF-04680	c15	N71-19489	NASA-CASE-XMS-02182	c10	N71-28783
NASA-CASE-XMF-04709	c15	N71-15609	NASA-CASE-XMS-02184	c15	N71-20813
NASA-CASE-XMF-04958-1	c10	N71-26414	NASA-CASE-XMS-02383	c15	N71-15918
NASA-CASE-XMF-04966	c14	N71-17658	NASA-CASE-XMS-02399	c05	N71-22896
NASA-CASE-XMF-05046	c33	N71-28892	NASA-CASE-XMS-02532	c15	N70-41808
NASA-CASE-XMF-05114	c15	N71-17650	NASA-CASE-XMS-02677	c31	N70-42075
NASA-CASE-XMF-05114-2	c15	N71-26148	NASA-CASE-XMS-02744	c33	N75-27249

NUMBER INDEX

NASA-CASE-XMS-02872	c05	N69-21925	NASA-CASE-XNP-00214	c15	N70-36908
NASA-CASE-XMS-02930	c11	N71-23042	NASA-CASE-XNP-00217	c28	N70-38181
NASA-CASE-XMS-02952	c18	N71-20742	NASA-CASE-XNP-00234	c28	N70-38645
NASA-CASE-XMS-02977	c11	N71-10746	NASA-CASE-XNP-00249	c28	N70-38249
NASA-CASE-XMS-03252	c15	N71-10658	NASA-CASE-XNP-00250	c11	N71-28779
NASA-CASE-XMS-03371	c05	N70-42000	NASA-CASE-XNP-00294	c21	N70-36938
NASA-CASE-XMS-03454	c09	N71-20658	NASA-CASE-XNP-00384	c09	N71-13530
NASA-CASE-XMS-03478	c14	N71-21040	NASA-CASE-XNP-00416	c15	N70-36947
NASA-CASE-XMS-03537	c15	N69-21471	NASA-CASE-XNP-00425	c11	N70-38202
NASA-CASE-XMS-03542	c09	N71-28926	NASA-CASE-XNP-00431	c09	N70-38998
NASA-CASE-XMS-03613	c31	N71-16346	NASA-CASE-XNP-00432	c08	N70-35423
NASA-CASE-XMS-03700	c15	N69-24266	NASA-CASE-XNP-00438	c21	N70-35089
NASA-CASE-XMS-03722	c15	N71-21530	NASA-CASE-XNP-00449	c14	N70-35220
NASA-CASE-XMS-03745	c15	N71-21076	NASA-CASE-XNP-00450	c15	N70-38603
NASA-CASE-XMS-03792	c14	N70-41812	NASA-CASE-XNP-00459	c11	N70-38675
NASA-CASE-XMS-04061-1	c09	N69-39885	NASA-CASE-XNP-00463	c33	N70-38847
NASA-CASE-XMS-04072	c15	N70-42017	NASA-CASE-XNP-00465	c21	N70-35395
NASA-CASE-XMS-04142	c31	N70-41631	NASA-CASE-XNP-00476	c15	N70-38620
NASA-CASE-XMS-04170	c05	N71-22748	NASA-CASE-XNP-00477	c08	N73-28045
NASA-CASE-XMS-04178	c15	N71-22798	NASA-CASE-XNP-00540	c09	N70-35382
NASA-CASE-XMS-04201	c14	N71-22990	NASA-CASE-XNP-00595	c15	N70-34967
NASA-CASE-XMS-04212-1	c05	N71-12346	NASA-CASE-XNP-00597	c18	N71-23088
NASA-CASE-XMS-04213-1	c09	N71-26002	NASA-CASE-XNP-00610	c28	N70-36910
NASA-CASE-XMS-04215-1	c09	N69-39987	NASA-CASE-XNP-00611	c09	N70-35219
NASA-CASE-XMS-04268	c33	N71-16277	NASA-CASE-XNP-00612	c11	N70-38182
NASA-CASE-XMS-04269	c16	N71-22895	NASA-CASE-XNP-00614	c14	N70-36907
NASA-CASE-XMS-04292	c15	N71-22722	NASA-CASE-XNP-00637	c14	N70-40273
NASA-CASE-XMS-04300	c09	N71-19479	NASA-CASE-XNP-00644	c03	N70-36803
NASA-CASE-XMS-04312	c07	N71-22984	NASA-CASE-XNP-00646	c14	N70-35666
NASA-CASE-XMS-04318	c15	N69-27871	NASA-CASE-XNP-00650	c27	N71-28929
NASA-CASE-XMS-04390	c31	N70-41871	NASA-CASE-XNP-00676	c15	N70-38996
NASA-CASE-XMS-04533	c15	N71-23086	NASA-CASE-XNP-00683	c09	N70-35425
NASA-CASE-XMS-04545	c15	N71-22878	NASA-CASE-XNP-00708	c14	N70-35394
NASA-CASE-XMS-04625	c05	N71-20718	NASA-CASE-XNP-00710	c15	N71-10778
NASA-CASE-XMS-04798	c11	N71-21474	NASA-CASE-XNP-00732	c28	N70-41447
NASA-CASE-XMS-04826	c28	N71-28849	NASA-CASE-XNP-00733	c06	N70-34946
NASA-CASE-XMS-04843	c03	N69-21469	NASA-CASE-XNP-00738	c09	N70-38201
NASA-CASE-XMS-04890-1	c15	N70-22192	NASA-CASE-XNP-00745	c10	N71-28960
NASA-CASE-XMS-04917	c14	N69-24257	NASA-CASE-XNP-00746	c07	N71-21476
NASA-CASE-XMS-04919	c09	N71-23270	NASA-CASE-XNP-00748	c07	N70-36911
NASA-CASE-XMS-04935	c05	N71-11190	NASA-CASE-XNP-00777	c10	N71-19469
NASA-CASE-XMS-05303	c07	N69-27462	NASA-CASE-XNP-00816	c28	N71-28928
NASA-CASE-XMS-05304	c05	N71-12336	NASA-CASE-XNP-00826	c03	N71-20895
NASA-CASE-XMS-05307	c09	N69-24330	NASA-CASE-XNP-00840	c15	N70-38225
NASA-CASE-XMS-05365	c14	N71-22993	NASA-CASE-XNP-00876	c28	N70-41311
NASA-CASE-XMS-05454-1	c07	N71-12391	NASA-CASE-XNP-00911	c08	N70-41961
NASA-CASE-XMS-05516	c15	N71-17803	NASA-CASE-XNP-00920	c15	N71-15906
NASA-CASE-XMS-05562-1	c09	N69-39986	NASA-CASE-XNP-00952	c10	N71-23271
NASA-CASE-XMS-05605-1	c10	N71-19468	NASA-CASE-XNP-01012	c08	N71-28925
NASA-CASE-XMS-05731	c35	N75-29382	NASA-CASE-XNP-01020	c03	N71-12260
NASA-CASE-XMS-05890	c09	N71-23191	NASA-CASE-XNP-01056	c14	N71-23041
NASA-CASE-XMS-05894-1	c15	N69-21924	NASA-CASE-XNP-01057	c07	N71-15907
NASA-CASE-XMS-05909-1	c14	N69-27459	NASA-CASE-XNP-01058	c09	N71-12540
NASA-CASE-XMS-05936	c14	N70-41682	NASA-CASE-XNP-01059	c23	N71-21821
NASA-CASE-XMS-06056-1	c23	N71-24857	NASA-CASE-XNP-01068	c10	N71-28739
NASA-CASE-XMS-06061	c05	N71-23317	NASA-CASE-XNP-01104	c28	N70-39931
NASA-CASE-XMS-06064	c05	N71-23096	NASA-CASE-XNP-01107	c10	N71-28859
NASA-CASE-XMS-06162	c31	N71-28851	NASA-CASE-XNP-01152	c15	N70-41811
NASA-CASE-XMS-06236	c14	N71-21007	NASA-CASE-XNP-01153	c32	N71-17645
NASA-CASE-XMS-06329-1	c15	N71-20441	NASA-CASE-XNP-01185	c26	N73-28710
NASA-CASE-XMS-06497	c14	N71-26244	NASA-CASE-XNP-01187	c15	N73-28516
NASA-CASE-XMS-06740-1	c07	N71-26579	NASA-CASE-XNP-01188	c15	N73-32361
NASA-CASE-XMS-06761	c05	N69-23192	NASA-CASE-XNP-01193	c10	N71-16057
NASA-CASE-XMS-06767-1	c14	N71-20435	NASA-CASE-XNP-01263-2	c15	N71-26312
NASA-CASE-XMS-06782	c32	N71-15974	NASA-CASE-XNP-01296	c33	N75-27250
NASA-CASE-XMS-06876	c15	N71-21536	NASA-CASE-XNP-01306	c07	N71-20814
NASA-CASE-XMS-06949	c09	N69-21467	NASA-CASE-XNP-01306-2	c09	N71-24596
NASA-CASE-XMS-07168	c07	N71-11300	NASA-CASE-XNP-01307	c21	N70-41856
NASA-CASE-XMS-07487	c15	N71-23255	NASA-CASE-XNP-01310	c33	N71-28852
NASA-CASE-XMS-07846-1	c09	N69-21927	NASA-CASE-XNP-01311	c26	N75-29236
NASA-CASE-XMS-08589-1	c09	N71-20569	NASA-CASE-XNP-01318	c10	N71-23033
NASA-CASE-XMS-09310	c15	N71-22706	NASA-CASE-XNP-01328	c26	N71-18064
NASA-CASE-XMS-09352	c09	N71-23316	NASA-CASE-XNP-01383	c09	N71-10659
NASA-CASE-XMS-09571	c05	N71-19439	NASA-CASE-XNP-01390	c28	N70-41275
NASA-CASE-XMS-09610	c07	N71-24625	NASA-CASE-XNP-01412	c15	N70-42034
NASA-CASE-XMS-09632-1	c05	N71-11203	NASA-CASE-XNP-01464	c03	N71-10728
NASA-CASE-XMS-09635	c05	N71-24623	NASA-CASE-XNP-01466	c10	N71-26434
NASA-CASE-XMS-09636	c05	N71-12344	NASA-CASE-XNP-01472	c14	N70-41807
NASA-CASE-XMS-09637-1	c05	N71-24730	NASA-CASE-XNP-01501	c21	N70-41930
NASA-CASE-XMS-09652-1	c05	N71-26333	NASA-CASE-XNP-01567	c15	N70-41310
NASA-CASE-XMS-09690	c33	N72-25913	NASA-CASE-XNP-01641	c15	N71-22997
NASA-CASE-XMS-09691-1	c18	N71-15545	NASA-CASE-XNP-01659	c14	N71-23039
NASA-CASE-XMS-10269	c05	N71-24147	NASA-CASE-XNP-01660	c14	N71-23036
NASA-CASE-XMS-10660-1	c15	N71-25975	NASA-CASE-XNP-01735	c07	N71-22750
NASA-CASE-XMS-10984-1	c10	N71-19417	NASA-CASE-XNP-01747	c15	N71-23024
NASA-CASE-XMS-10993	c15	N71-28936	NASA-CASE-XNP-01749	c27	N70-41897
NASA-CASE-XMS-12158-1	c31	N69-27499	NASA-CASE-XNP-01753	c08	N71-22897
NASA-CASE-XMS-13052	c14	N71-20427	NASA-CASE-XNP-01848	c15	N71-28959

NUMBER INDEX

NASA-CASE-XNP-01855	c15	N71-28937	NASA-CASE-XNP-05297	c15	N71-23811
NASA-CASE-XNP-01951	c09	N70-41929	NASA-CASE-XNP-05381	c09	N71-20842
NASA-CASE-XNP-01954	c28	N71-28850	NASA-CASE-XNP-05382	c10	N71-23544
NASA-CASE-XNP-01959	c26	N71-23043	NASA-CASE-XNP-05415	c08	N71-12505
NASA-CASE-XNP-01960	c09	N71-23027	NASA-CASE-XNP-05429	c26	N71-21824
NASA-CASE-XNP-01961	c26	N71-29156	NASA-CASE-XNP-05524	c33	N71-24876
NASA-CASE-XNP-01962	c32	N70-41370	NASA-CASE-XNP-05530	c14	N73-32321
NASA-CASE-XNP-02029	c14	N70-41955	NASA-CASE-XNP-05535	c14	N71-23040
NASA-CASE-XNP-02092	c15	N70-42033	NASA-CASE-XNP-05612	c09	N69-21468
NASA-CASE-XNP-02139	c18	N71-24184	NASA-CASE-XNP-05634	c15	N71-24834
NASA-CASE-XNP-02140	c09	N71-23097	NASA-CASE-XNP-05821	c03	N71-11056
NASA-CASE-XNP-02251	c12	N71-20896	NASA-CASE-XNP-05975	c15	N69-23185
NASA-CASE-XNP-02278	c15	N71-28951	NASA-CASE-XNP-06028	c09	N71-23189
NASA-CASE-XNP-02340	c23	N69-24332	NASA-CASE-XNP-06031	c15	N71-15606
NASA-CASE-XNP-02341	c15	N71-21531	NASA-CASE-XNP-06032	c09	N69-21926
NASA-CASE-XNP-02389	c07	N71-28900	NASA-CASE-XNP-06234	c10	N71-27137
NASA-CASE-XNP-02500	c18	N71-27397	NASA-CASE-XNP-06503	c23	N71-29049
NASA-CASE-XNP-02507	c31	N71-17679	NASA-CASE-XNP-06505	c10	N71-24799
NASA-CASE-XNP-02588	c15	N71-18613	NASA-CASE-XNP-06506	c03	N71-11050
NASA-CASE-XNP-02597	c24	N71-20518	NASA-CASE-XNP-06507	c09	N71-23548
NASA-CASE-XNP-02595	c31	N71-21881	NASA-CASE-XNP-06508	c18	N69-39895
NASA-CASE-XNP-02654	c10	N70-42032	NASA-CASE-XNP-06509	c14	N71-23226
NASA-CASE-XNP-02713	c10	N69-39888	NASA-CASE-XNP-06510	c14	N71-23797
NASA-CASE-XNP-02723	c07	N70-41680	NASA-CASE-XNP-06611	c07	N71-26102
NASA-CASE-XNP-02748	c08	N71-22749	NASA-CASE-XNP-06914	c15	N71-21489
NASA-CASE-XNP-02778	c08	N71-22710	NASA-CASE-XNP-06933	c14	N73-32321
NASA-CASE-XNP-02791	c07	N71-23026	NASA-CASE-XNP-06936	c15	N71-24695
NASA-CASE-XNP-02792	c14	N71-28958	NASA-CASE-XNP-06937	c09	N71-19516
NASA-CASE-XNP-02839	c28	N70-41922	NASA-CASE-XNP-06942	c28	N71-23293
NASA-CASE-XNP-02862-1	c15	N71-26294	NASA-CASE-XNP-06957	c14	N71-21088
NASA-CASE-XNP-02888	c18	N71-21068	NASA-CASE-XNP-07040	c08	N71-12500
NASA-CASE-XNP-02923	c28	N71-23081	NASA-CASE-XNP-07169	c15	N73-32362
NASA-CASE-XNP-02982	c31	N70-41855	NASA-CASE-XNP-07477	c09	N71-26092
NASA-CASE-XNP-02983	c14	N71-21091	NASA-CASE-XNP-07478	c14	N69-21923
NASA-CASE-XNP-03063	c17	N71-23365	NASA-CASE-XNP-07481	c25	N69-21929
NASA-CASE-XNP-03128	c10	N70-41991	NASA-CASE-XNP-07659	c06	N71-22975
NASA-CASE-XNP-03134	c07	N71-10676	NASA-CASE-XNP-08124	c15	N71-27184
NASA-CASE-XNP-03250	c06	N71-23500	NASA-CASE-XNP-08124-2	c06	N73-13129
NASA-CASE-XNP-03263	c09	N71-18843	NASA-CASE-XNP-08274	c10	N71-13537
NASA-CASE-XNP-03282	c28	N72-20758	NASA-CASE-XNP-08567	c09	N71-26000
NASA-CASE-XNP-03332	c09	N71-10618	NASA-CASE-XNP-08680	c14	N71-22995
NASA-CASE-XNP-03378	c03	N71-11051	NASA-CASE-XNP-08832	c08	N71-12506
NASA-CASE-XNP-03413	c03	N71-26726	NASA-CASE-XNP-08836	c09	N71-12515
NASA-CASE-XNP-03459	c15	N71-21078	NASA-CASE-XNP-08837	c18	N71-16210
NASA-CASE-XNP-03459-2	c18	N71-15688	NASA-CASE-XNP-08840	c23	N71-16365
NASA-CASE-XNP-03578	c11	N71-23030	NASA-CASE-XNP-08875	c10	N71-23099
NASA-CASE-XNP-03623	c09	N73-28084	NASA-CASE-XNP-08876	c17	N73-28573
NASA-CASE-XNP-03637	c15	N71-21311	NASA-CASE-XNP-08877	c15	N71-23025
NASA-CASE-XNP-03692	c28	N71-24321	NASA-CASE-XNP-08880	c09	N71-24808
NASA-CASE-XNP-03744	c10	N71-20448	NASA-CASE-XNP-08881	c17	N71-28747
NASA-CASE-XNP-03796	c23	N71-15467	NASA-CASE-XNP-08882	c15	N69-39935
NASA-CASE-XNP-03835	c06	N71-23499	NASA-CASE-XNP-08883	c23	N71-16101
NASA-CASE-XNP-03853	c23	N71-21882	NASA-CASE-XNP-08897	c15	N71-17694
NASA-CASE-XNP-03878	c26	N75-27127	NASA-CASE-XNP-08907	c23	N71-29123
NASA-CASE-XNP-03914	c21	N71-10771	NASA-CASE-XNP-08961	c14	N71-24809
NASA-CASE-XNP-03916	c09	N71-28810	NASA-CASE-XNP-09205	c14	N71-17657
NASA-CASE-XNP-03918	c14	N71-23087	NASA-CASE-XNP-09225	c09	N69-24333
NASA-CASE-XNP-03930	c14	N69-24331	NASA-CASE-XNP-09227	c15	N69-24319
NASA-CASE-XNP-03972	c15	N71-23048	NASA-CASE-XNP-09228	c09	N69-27500
NASA-CASE-XNP-04023	c06	N71-28808	NASA-CASE-XNP-09450	c10	N71-18723
NASA-CASE-XNP-04067	c08	N71-22707	NASA-CASE-XNP-09451	c06	N71-26754
NASA-CASE-XNP-04111	c14	N71-15622	NASA-CASE-XNP-09452	c15	N69-27504
NASA-CASE-XNP-04124	c28	N71-21822	NASA-CASE-XNP-09453	c08	N71-19420
NASA-CASE-XNP-04148	c17	N71-24830	NASA-CASE-XNP-09461	c28	N72-23809
NASA-CASE-XNP-04161	c14	N71-15599	NASA-CASE-XNP-09462	c14	N71-17584
NASA-CASE-XNP-04162-1	c08	N70-34675	NASA-CASE-XNP-09469	c24	N71-25555
NASA-CASE-XNP-04167-2	c25	N72-24753	NASA-CASE-XNP-09572	c14	N71-15621
NASA-CASE-XNP-04167-3	c36	N77-19416	NASA-CASE-XNP-09698	c15	N71-18580
NASA-CASE-XNP-04180	c07	N69-39736	NASA-CASE-XNP-09699	c06	N71-24607
NASA-CASE-XNP-04183	c09	N69-24329	NASA-CASE-XNP-09701	c14	N71-26475
NASA-CASE-XNP-04231	c14	N73-32325	NASA-CASE-XNP-09702	c15	N71-17654
NASA-CASE-XNP-04262-2	c17	N71-26773	NASA-CASE-XNP-09704	c12	N71-18615
NASA-CASE-XNP-04264	c03	N69-21337	NASA-CASE-XNP-09744	c27	N71-16392
NASA-CASE-XNP-04338	c17	N71-23046	NASA-CASE-XNP-09750	c14	N69-39937
NASA-CASE-XNP-04339	c17	N71-29137	NASA-CASE-XNP-09752	c14	N69-21541
NASA-CASE-XNP-04389	c28	N71-20942	NASA-CASE-XNP-09755	c46	N74-23069
NASA-CASE-XNP-04623	c10	N71-26103	NASA-CASE-XNP-09759	c08	N71-24891
NASA-CASE-XNP-04731	c15	N71-24042	NASA-CASE-XNP-09763	c14	N71-20461
NASA-CASE-XNP-04732	c09	N71-20851	NASA-CASE-XNP-09768	c09	N71-12516
NASA-CASE-XNP-04758	c03	N71-24605	NASA-CASE-XNP-09770	c15	N71-20440
NASA-CASE-XNP-04780	c08	N71-19687	NASA-CASE-XNP-09770-2	c15	N72-22483
NASA-CASE-XNP-04816	c06	N69-39936	NASA-CASE-XNP-09770-3	c11	N71-27036
NASA-CASE-XNP-04817	c14	N71-23225	NASA-CASE-XNP-09771	c09	N71-24841
NASA-CASE-XNP-04819	c08	N71-23295	NASA-CASE-XNP-09775	c09	N71-20445
NASA-CASE-XNP-04969	c11	N69-27466	NASA-CASE-XNP-09776	c09	N69-39929
NASA-CASE-XNP-05087	c15	N70-41960	NASA-CASE-XNP-09785	c08	N69-21928
NASA-CASE-XNP-05219	c16	N71-15550	NASA-CASE-XNP-09802	c33	N71-15641
NASA-CASE-XNP-05231	c14	N73-28491	NASA-CASE-XNP-09808	c09	N71-12518
NASA-CASE-XNP-05254	c07	N71-20791	NASA-CASE-XNP-09830	c07	N71-26102

NUMBER INDEX

NASA-CASE-XNF-09830	C14 N71-26266	US-PATENT-APPL-SN-30498	C37 N74-21063
NASA-CASE-XNF-09832	C30 N71-23723	US-PATENT-APPL-SN-31242	C28 N70-33374
NASA-CASE-XNF-10007-1	C46 N74-23068	US-PATENT-APPL-SN-31702	C16 N73-16536
NASA-CASE-XNF-10475	C15 N71-24679	US-PATENT-APPL-SN-31703	C09 N72-21244
NASA-CASE-XNF-10830	C07 N71-11281	US-PATENT-APPL-SN-31885	C10 N72-17172
NASA-CASE-XNF-10843	C07 N71-11267	US-PATENT-APPL-SN-32496	C15 N70-37925
NASA-CASE-XNF-10854	C10 N71-26331	US-PATENT-APPL-SN-32664	C11 N72-25287
		US-PATENT-APPL-SN-32665	C14 N72-22444
		US-PATENT-APPL-SN-33159	C10 N72-11256
		US-PATENT-APPL-SN-33535	C06 N72-17093
		US-PATENT-APPL-SN-34989	C36 N74-13205
		US-PATENT-APPL-SN-36531	C07 N72-25174
		US-PATENT-APPL-SN-36534	C21 N73-14692
		US-PATENT-APPL-SN-36819	C23 N72-22673
		US-PATENT-APPL-SN-36926	C28 N72-23810
		US-PATENT-APPL-SN-37050	C39 N74-26732
		US-PATENT-APPL-SN-38262	C28 N70-35422
		US-PATENT-APPL-SN-38814	C15 N72-11385
		US-PATENT-APPL-SN-38816	C70 N74-13436
		US-PATENT-APPL-SN-39185	C16 N72-25485
		US-PATENT-APPL-SN-39342	C09 N72-25252
		US-PATENT-APPL-SN-39343	C34 N74-18552
		US-PATENT-APPL-SN-39344	C14 N72-25409
		US-PATENT-APPL-SN-39755	C08 N72-21198
		US-PATENT-APPL-SN-41345	C09 N72-29172
		US-PATENT-APPL-SN-41346	C15 N72-24522
		US-PATENT-APPL-SN-41347	C09 N72-25256
		US-PATENT-APPL-SN-41348	C09 N72-23173
		US-PATENT-APPL-SN-41404	C03 N73-20039
		US-PATENT-APPL-SN-41430	C10 N72-20221
		US-PATENT-APPL-SN-41431	C37 N77-27400
		US-PATENT-APPL-SN-41455	C02 N70-33255
		US-PATENT-APPL-SN-42022	C15 N70-35409
		US-PATENT-APPL-SN-43327	C15 N72-26371
		US-PATENT-APPL-SN-43883	C18 N73-30532
		US-PATENT-APPL-SN-43884	C15 N72-25457
		US-PATENT-APPL-SN-45053	C33 N75-31330
		US-PATENT-APPL-SN-45519	C14 N72-25410
		US-PATENT-APPL-SN-45549	C27 N76-16228
		US-PATENT-APPL-SN-47061	C26 N72-25680
		US-PATENT-APPL-SN-47062	C15 N72-17451
		US-PATENT-APPL-SN-47063	C33 N72-25911
		US-PATENT-APPL-SN-47063	C33 N73-25952
		US-PATENT-APPL-SN-47120	C31 N70-33242
		US-PATENT-APPL-SN-47121	C09 N70-39915
		US-PATENT-APPL-SN-47122	C14 N70-34813
		US-PATENT-APPL-SN-47123	C15 N70-34817
		US-PATENT-APPL-SN-47440	C07 N73-20174
		US-PATENT-APPL-SN-47441	C09 N70-34559
		US-PATENT-APPL-SN-47443	C09 N72-17152
		US-PATENT-APPL-SN-50206	C07 N72-17109
		US-PATENT-APPL-SN-50207	C07 N72-20141
		US-PATENT-APPL-SN-50208	C14 N73-13418
		US-PATENT-APPL-SN-50339	C04 N72-33072
		US-PATENT-APPL-SN-51317	C14 N73-30389
		US-PATENT-APPL-SN-51473	C02 N70-33266
		US-PATENT-APPL-SN-51477	C14 N72-25412
		US-PATENT-APPL-SN-53156	C10 N71-28860
		US-PATENT-APPL-SN-54270	C07 N72-25103
		US-PATENT-APPL-SN-54271	C02 N73-19074
		US-PATENT-APPL-SN-54540	C15 N72-29488
		US-PATENT-APPL-SN-54540	C37 N74-15125
		US-PATENT-APPL-SN-54552	C27 N70-34783
		US-PATENT-APPL-SN-54552	C20 N77-17143
		US-PATENT-APPL-SN-55333	C10 N73-16206
		US-PATENT-APPL-SN-55534	C11 N72-25288
		US-PATENT-APPL-SN-55535	C14 N73-20474
		US-PATENT-APPL-SN-55536	C14 N72-29464
		US-PATENT-APPL-SN-55537	C18 N72-25540
		US-PATENT-APPL-SN-55806	C06 N72-31140
		US-PATENT-APPL-SN-56791	C10 N72-16172
		US-PATENT-APPL-SN-57252	C14 N72-25414
		US-PATENT-APPL-SN-57253	C18 N72-25541
		US-PATENT-APPL-SN-57399	C03 N72-26034
		US-PATENT-APPL-SN-58147	C28 N70-33356
		US-PATENT-APPL-SN-59892	C06 N73-30097
		US-PATENT-APPL-SN-59892	C15 N74-27360
		US-PATENT-APPL-SN-59893	C15 N72-25456
		US-PATENT-APPL-SN-59894	C23 N73-13662
		US-PATENT-APPL-SN-59895	C15 N72-20445
		US-PATENT-APPL-SN-59956	C14 N72-27411
		US-PATENT-APPL-SN-59966	C21 N72-25595
		US-PATENT-APPL-SN-59968	C15 N72-27484
		US-PATENT-APPL-SN-59969	C09 N72-25249
		US-PATENT-APPL-SN-60276	C22 N73-32528
		US-PATENT-APPL-SN-60531	C28 N70-37980
		US-PATENT-APPL-SN-60536	C02 N70-38009
		US-PATENT-APPL-SN-60876	C15 N72-27485
		US-PATENT-APPL-SN-60881	C32 N72-25877
US-PATENT-APEL-SN-1-881-	C33 N77-22386		
US-PATENT-APEL-SN-0914	C28 N70-38711		
US-PATENT-APEL-SN-2792	C14 N70-33386		
US-PATENT-APEL-SN-3151	C05 N72-27102		
US-PATENT-APEL-SN-3417	C15 N72-22490		
US-PATENT-APEL-SN-3418	C15 N72-20446		
US-PATENT-APEL-SN-3418	C15 N73-19457		
US-PATENT-APEL-SN-3654	C35 N77-27367		
US-PATENT-APEL-SN-3696	C10 N72-20224		
US-PATENT-APEL-SN-5114	C06 N72-25150		
US-PATENT-APEL-SN-6610	C15 N72-22492		
US-PATENT-APEL-SN-6615	C03 N72-25019		
US-PATENT-APEL-SN-6616	C03 N72-22042		
US-PATENT-APEL-SN-6617	C15 N72-22488		
US-PATENT-APEL-SN-7668	C15 N71-26611		
US-PATENT-APEL-SN-7669	C31 N72-18859		
US-PATENT-APEL-SN-7867	C14 N72-17324		
US-PATENT-APEL-SN-7868	C10 N72-17173		
US-PATENT-APEL-SN-8203	C15 N70-33180		
US-PATENT-APEL-SN-8204	C31 N70-37981		
US-PATENT-APEL-SN-8497	C14 N72-11363		
US-PATENT-APEL-SN-8498	C05 N71-24729		
US-PATENT-APEL-SN-8636	C15 N72-25451		
US-PATENT-APEL-SN-8650	C03 N72-25021		
US-PATENT-APEL-SN-9251	C03 N70-34646		
US-PATENT-APEL-SN-10161	C33 N72-20915		
US-PATENT-APEL-SN-10329	C09 N72-25251		
US-PATENT-APEL-SN-10812	C28 N70-40367		
US-PATENT-APEL-SN-10827	C14 N72-28436		
US-PATENT-APEL-SN-11220	C14 N73-30389		
US-PATENT-APEL-SN-11853	C15 N71-28951		
US-PATENT-APEL-SN-12661	C14 N72-22437		
US-PATENT-APEL-SN-13266	C05 N72-23085		
US-PATENT-APEL-SN-14488	C09 N70-38995		
US-PATENT-APEL-SN-15019	C15 N72-17455		
US-PATENT-APEL-SN-15020	C14 N70-34697		
US-PATENT-APEL-SN-15022	C15 N72-21465		
US-PATENT-APEL-SN-15023	C15 N70-34699		
US-PATENT-APEL-SN-15024	C09 N72-21245		
US-PATENT-APEL-SN-15025	C03 N72-20033		
US-PATENT-APEL-SN-15222	C18 N72-25539		
US-PATENT-APEL-SN-16808	C14 N72-22445		
US-PATENT-APEL-SN-17101	C28 N72-18766		
US-PATENT-APEL-SN-18427	C09 N72-23172		
US-PATENT-APEL-SN-18776	C28 N70-33284		
US-PATENT-APEL-SN-18780	C12 N70-33305		
US-PATENT-APEL-SN-18982	C28 N72-11708		
US-PATENT-APEL-SN-19572	C35 N77-27368		
US-PATENT-APEL-SN-19585	C15 N72-25455		
US-PATENT-APEL-SN-19971	C09 N70-33312		
US-PATENT-APEL-SN-20960	C15 N72-17453		
US-PATENT-APEL-SN-21263	C01 N71-12217		
US-PATENT-APEL-SN-21508	C08 N72-20176		
US-PATENT-APEL-SN-21644	C05 N72-22092		
US-PATENT-APEL-SN-21732	C15 N70-26819		
US-PATENT-APEL-SN-21906	C09 N72-17157		
US-PATENT-APEL-SN-22265	C14 N72-21405		
US-PATENT-APEL-SN-22320	C14 N72-11365		
US-PATENT-APEL-SN-23132	C08 N72-22163		
US-PATENT-APEL-SN-23532	C07 N72-21117		
US-PATENT-APEL-SN-24154	C15 N70-35679		
US-PATENT-APEL-SN-24154	C15 N72-17450		
US-PATENT-APEL-SN-24155	C14 N73-26432		
US-PATENT-APEL-SN-24224	C09 N72-20200		
US-PATENT-APEL-SN-25175	C28 N70-39895		
US-PATENT-APEL-SN-25487	C08 N72-21197		
US-PATENT-APEL-SN-25488	C08 N72-25206		
US-PATENT-APEL-SN-26375	C02 N70-33286		
US-PATENT-APEL-SN-26375	C02 N70-34858		
US-PATENT-APEL-SN-26573	C31 N72-22874		
US-PATENT-APEL-SN-27340	C15 N72-20442		
US-PATENT-APEL-SN-28175	C21 N70-33279		
US-PATENT-APEL-SN-28235	C10 N72-17171		
US-PATENT-APEL-SN-29917	C15 N73-13465		
US-PATENT-APEL-SN-29917	C26 N74-10521		
US-PATENT-APEL-SN-29917	C37 N74-13179		
US-PATENT-APEL-SN-29979	C09 N75-15662		

NUMBER INDEX

US-PATENT-APPL-SN-60882	c05 N73-32011	US-PATENT-APPL-SN-89211	c14 N73-12446
US-PATENT-APPL-SN-60883	c10 N73-13235	US-PATENT-APPL-SN-89212	c08 N72-25208
US-PATENT-APPL-SN-60950	c04 N73-27052	US-PATENT-APPL-SN-90595	c03 N72-20031
US-PATENT-APPL-SN-61329	c31 N70-37986	US-PATENT-APPL-SN-91180	c14 N70-40240
US-PATENT-APPL-SN-61535	c15 N72-25453	US-PATENT-APPL-SN-91642	c14 N72-31446
US-PATENT-APPL-SN-61854	c12 N72-21310	US-PATENT-APPL-SN-93329	c09 N73-26195
US-PATENT-APPL-SN-61855	c07 N72-33146	US-PATENT-APPL-SN-94049	c14 N73-20476
US-PATENT-APPL-SN-63144	c16 N72-28521	US-PATENT-APPL-SN-94259	c27 N70-35534
US-PATENT-APPL-SN-63195	c14 N72-27408	US-PATENT-APPL-SN-94347	c05 N72-25122
US-PATENT-APPL-SN-63383	c08 N72-20177	US-PATENT-APPL-SN-94369	c07 N71-28965
US-PATENT-APPL-SN-63384	c05 N72-22093	US-PATENT-APPL-SN-94374	c14 N72-25411
US-PATENT-APPL-SN-63532	c08 N72-25209	US-PATENT-APPL-SN-94952	c14 N70-34158
US-PATENT-APPL-SN-63610	c06 N72-25147	US-PATENT-APPL-SN-95183	c08 N73-12175
US-PATENT-APPL-SN-64224	c17 N70-38490	US-PATENT-APPL-SN-95189	c74 N77-21941
US-PATENT-APPL-SN-64226	c17 N70-38198	US-PATENT-APPL-SN-97112	c21 N70-34539
US-PATENT-APPL-SN-64391	c31 N72-25842	US-PATENT-APPL-SN-97343	c10 N72-27246
US-PATENT-APPL-SN-64709	c10 N72-28240	US-PATENT-APPL-SN-97829	c06 N73-11129
US-PATENT-APPL-SN-64723	c07 N72-25170	US-PATENT-APPL-SN-98517	c09 N72-25250
US-PATENT-APPL-SN-65548	c18 N70-39897	US-PATENT-APPL-SN-98640	c09 N72-25253
US-PATENT-APPL-SN-65840	c10 N72-20225	US-PATENT-APPL-SN-98772	c08 N73-12176
US-PATENT-APPL-SN-66004	c15 N72-25450	US-PATENT-APPL-SN-98773	c15 N72-22486
US-PATENT-APPL-SN-66206	c11 N73-13257	US-PATENT-APPL-SN-98774	c14 N73-19419
US-PATENT-APPL-SN-67730	c15 N73-13463	US-PATENT-APPL-SN-98798	c09 N73-13209
US-PATENT-APPL-SN-67815	c28 N72-22771	US-PATENT-APPL-SN-99174	c14 N72-33377
US-PATENT-APPL-SN-68023	c05 N72-33096	US-PATENT-APPL-SN-99175	c09 N72-25258
US-PATENT-APPL-SN-68024	c17 N72-22535	US-PATENT-APPL-SN-99198	c31 N73-32749
US-PATENT-APPL-SN-69209	c15 N72-21463	US-PATENT-APPL-SN-99201	c15 N73-25512
US-PATENT-APPL-SN-69488	c23 N75-14834	US-PATENT-APPL-SN-99201	c37 N74-20063
US-PATENT-APPL-SN-70032	c11 N73-12264	US-PATENT-APPL-SN-99524	c06 N72-27144
US-PATENT-APPL-SN-70967	c07 N73-13149	US-PATENT-APPL-SN-99901	c37 N74-10474
US-PATENT-APPL-SN-70967	c32 N74-10132	US-PATENT-APPL-SN-99903	c11 N73-12265
US-PATENT-APPL-SN-71047	c09 N72-21247	US-PATENT-APPL-SN-100637	c37 N75-18574
US-PATENT-APPL-SN-71048	c18 N73-12604	US-PATENT-APPL-SN-100639	c14 N72-32452
US-PATENT-APPL-SN-71366	c17 N71-20941	US-PATENT-APPL-SN-100774	c06 N72-25151
US-PATENT-APPL-SN-72720	c09 N73-12211	US-PATENT-APPL-SN-100774	c06 N73-32030
US-PATENT-APPL-SN-73283	c15 N72-28495	US-PATENT-APPL-SN-100996	c08 N73-13187
US-PATENT-APPL-SN-73310	c09 N72-25247	US-PATENT-APPL-SN-101029	c31 N70-38676
US-PATENT-APPL-SN-73367	c14 N71-15969	US-PATENT-APPL-SN-101214	c14 N73-26430
US-PATENT-APPL-SN-73422	c15 N72-25454	US-PATENT-APPL-SN-101354	c10 N73-16205
US-PATENT-APPL-SN-73834	c15 N72-23497	US-PATENT-APPL-SN-102412	c25 N72-33696
US-PATENT-APPL-SN-73922	c14 N73-25461	US-PATENT-APPL-SN-103077	c25 N72-32688
US-PATENT-APPL-SN-73932	c15 N72-22485	US-PATENT-APPL-SN-103078	c15 N73-12486
US-PATENT-APPL-SN-74759	c14 N73-20478	US-PATENT-APPL-SN-103091	c37 N74-23070
US-PATENT-APPL-SN-74861	c27 N72-25699	US-PATENT-APPL-SN-103229	c14 N72-22439
US-PATENT-APPL-SN-74862	c27 N73-16764	US-PATENT-APPL-SN-103551	c31 N73-14854
US-PATENT-APPL-SN-75431	c21 N72-31637	US-PATENT-APPL-SN-104047	c15 N72-31483
US-PATENT-APPL-SN-76899	c09 N72-22201	US-PATENT-APPL-SN-104048	c31 N73-14855
US-PATENT-APPL-SN-77169	c14 N72-21408	US-PATENT-APPL-SN-104187	c14 N70-36618
US-PATENT-APPL-SN-77220	c14 N72-27409	US-PATENT-APPL-SN-104188	c09 N70-34819
US-PATENT-APPL-SN-77221	c08 N72-25210	US-PATENT-APPL-SN-104346	c14 N73-28448
US-PATENT-APPL-SN-77251	c25 N70-41628	US-PATENT-APPL-SN-104884	c15 N72-33476
US-PATENT-APPL-SN-77252	c02 N70-37939	US-PATENT-APPL-SN-104885	c14 N73-24472
US-PATENT-APPL-SN-77256	c15 N70-33323	US-PATENT-APPL-SN-104885	c35 N76-15434
US-PATENT-APPL-SN-77786	c14 N72-27412	US-PATENT-APPL-SN-105518	c23 N71-15978
US-PATENT-APPL-SN-78065	c08 N72-22162	US-PATENT-APPL-SN-106106	c91 N74-13130
US-PATENT-APPL-SN-78073	c15 N73-20514	US-PATENT-APPL-SN-106135	c28 N70-34294
US-PATENT-APPL-SN-78074	c05 N72-25121	US-PATENT-APPL-SN-106424	c17 N73-24569
US-PATENT-APPL-SN-78717	c05 N73-13114	US-PATENT-APPL-SN-106465	c30 N73-12884
US-PATENT-APPL-SN-78766	c05 N74-10907	US-PATENT-APPL-SN-107298	c32 N73-13921
US-PATENT-APPL-SN-80029	c14 N73-32320	US-PATENT-APPL-SN-107376	c15 N73-25513
US-PATENT-APPL-SN-80029	c74 N74-20008	US-PATENT-APPL-SN-107379	c10 N72-33230
US-PATENT-APPL-SN-80368	c09 N73-20231	US-PATENT-APPL-SN-107380	c28 N73-13773
US-PATENT-APPL-SN-80369	c09 N72-22198	US-PATENT-APPL-SN-107659	c23 N73-20741
US-PATENT-APPL-SN-81095	c13 N72-25323	US-PATENT-APPL-SN-107866	c17 N70-36616
US-PATENT-APPL-SN-81096	c14 N73-14427	US-PATENT-APPL-SN-107870	c15 N70-36411
US-PATENT-APPL-SN-82279	c03 N76-32140	US-PATENT-APPL-SN-108824	c31 N73-13898
US-PATENT-APPL-SN-82280	c09 N72-25262	US-PATENT-APPL-SN-109789	c09 N70-34596
US-PATENT-APPL-SN-82647	c28 N72-22772	US-PATENT-APPL-SN-110402	c09 N72-27226
US-PATENT-APPL-SN-82648	c12 N72-25292	US-PATENT-APPL-SN-110591	c15 N70-39896
US-PATENT-APPL-SN-82649	c08 N73-30135	US-PATENT-APPL-SN-111123	c18 N71-31140
US-PATENT-APPL-SN-82658	c30 N70-40309	US-PATENT-APPL-SN-111998	c21 N73-30640
US-PATENT-APPL-SN-83816	c44 N74-14784	US-PATENT-APPL-SN-112988	c07 N72-32169
US-PATENT-APPL-SN-84002	c08 N73-20217	US-PATENT-APPL-SN-112998	c14 N73-12445
US-PATENT-APPL-SN-84212	c27 N74-17283	US-PATENT-APPL-SN-112999	c23 N72-25619
US-PATENT-APPL-SN-84289	c15 N73-14469	US-PATENT-APPL-SN-114772	c04 N76-26175
US-PATENT-APPL-SN-84290	c05 N73-20137	US-PATENT-APPL-SN-114846	c14 N73-12444
US-PATENT-APPL-SN-84961	c02 N70-34178	US-PATENT-APPL-SN-114847	c15 N72-28496
US-PATENT-APPL-SN-84962	c21 N70-36943	US-PATENT-APPL-SN-114848	c11 N72-23215
US-PATENT-APPL-SN-85585	c21 N70-35427	US-PATENT-APPL-SN-114849	c09 N72-27227
US-PATENT-APPL-SN-86018	c23 N71-30292	US-PATENT-APPL-SN-114873	c09 N73-28083
US-PATENT-APPL-SN-86417	c07 N72-25171	US-PATENT-APPL-SN-115082	c18 N73-13562
US-PATENT-APPL-SN-86548	c09 N72-21293	US-PATENT-APPL-SN-115083	c07 N73-25160
US-PATENT-APPL-SN-87222	c05 N72-27103	US-PATENT-APPL-SN-115134	c06 N73-13128
US-PATENT-APPL-SN-87550	c06 N72-25146	US-PATENT-APPL-SN-115944	c03 N71-34044
US-PATENT-APPL-SN-87551	c33 N73-16918	US-PATENT-APPL-SN-116777	c09 N73-19235
US-PATENT-APPL-SN-87597	c33 N74-22864	US-PATENT-APPL-SN-116778	c09 N72-33205
US-PATENT-APPL-SN-88435	c35 N74-15090	US-PATENT-APPL-SN-116786	c07 N72-25172
US-PATENT-APPL-SN-89209	c09 N72-25248	US-PATENT-APPL-SN-116790	c14 N73-30388
US-PATENT-APPL-SN-89210	c07 N73-26119	US-PATENT-APPL-SN-117575	c08 N73-12177

NUMBER INDEX

US-PATENT-APEL-SN-118169	.....	c14	N70-35220	US-PATENT-APPL-SN-151112	.....	c15	N70-34814
US-PATENT-APEI-SN-118200	.....	c15	N70-34247	US-PATENT-APPL-SN-151114	.....	c31	N70-34176
US-PATENT-APEI-SN-118202	.....	c28	N70-38710	US-PATENT-APPI-SN-151411	.....	c07	N73-26118
US-PATENT-APEI-SN-118203	.....	c14	N70-38602	US-PATENT-APPL-SN-151412	.....	c09	N73-32112
US-PATENT-APPL-SN-118269	.....	c33	N73-26958	US-PATENT-APPI-SN-151413	.....	c14	N73-12447
US-PATENT-APPL-SN-118270	.....	c09	N72-25260	US-PATENT-APPI-SN-151598	.....	c03	N70-38134
US-PATENT-APPL-SN-119282	.....	c03	N72-23048	US-PATENT-APPI-SN-152328	.....	c02	N74-20646
US-PATENT-APPL-SN-120241	.....	c15	N73-24513	US-PATENT-APPI-SN-152849	.....	c15	N73-30457
US-PATENT-APPI-SN-120795	.....	c07	N70-40202	US-PATENT-APPL-SN-153266	.....	c02	N70-38011
US-PATENT-APEI-SN-120797	.....	c14	N70-36824	US-PATENT-APPL-SN-153542	.....	c28	N73-32606
US-PATENT-APEI-SN-120803	.....	c08	N70-34743	US-PATENT-APPL-SN-153543	.....	c08	N73-26176
US-PATENT-APEI-SN-121328	.....	c23	N72-11568	US-PATENT-APPI-SN-153624	.....	c37	N75-27376
US-PATENT-APPL-SN-123253	.....	c10	N73-12244	US-PATENT-APPI-SN-154094	.....	c33	N72-27959
US-PATENT-APPL-SN-123597	.....	c21	N70-34297	US-PATENT-APPI-SN-154930	.....	c44	N76-14600
US-PATENT-APPL-SN-124909	.....	c14	N73-16483	US-PATENT-APPI-SN-154933	.....	c14	N73-25463
US-PATENT-APPL-SN-125234	.....	c07	N73-16121	US-PATENT-APPI-SN-154935	.....	c11	N72-27262
US-PATENT-APEL-SN-125235	.....	c51	N77-25769	US-PATENT-APPI-SN-155565	.....	c08	N73-25206
US-PATENT-APEI-SN-125236	.....	c14	N73-26431	US-PATENT-APPI-SN-155584	.....	c09	N70-40123
US-PATENT-APEI-SN-125979	.....	c09	N72-25255	US-PATENT-APPI-SN-155595	.....	c26	N73-28710
US-PATENT-APEI-SN-127234	.....	c08	N70-35423	US-PATENT-APPL-SN-155596	.....	c15	N73-32361
US-PATENT-APEL-SN-127480	.....	c37	N75-26377	US-PATENT-APPL-SN-155598	.....	c15	N73-28516
US-PATENT-APPL-SN-127481	.....	c24	N75-28135	US-PATENT-APPL-SN-156724	.....	c21	N73-13643
US-PATENT-APPL-SN-127618	.....	c02	N73-13008	US-PATENT-APPL-SN-156725	.....	c14	N73-27377
US-PATENT-APEL-SN-127647	.....	c15	N73-27405	US-PATENT-APEI-SN-156778	.....	c17	N72-28535
US-PATENT-APEI-SN-127915	.....	c02	N73-26004	US-PATENT-APPI-SN-158914	.....	c11	N70-36913
US-PATENT-APEI-SN-127984	.....	c33	N75-27250	US-PATENT-APPI-SN-158916	.....	c05	N70-41819
US-PATENT-APPL-SN-128419	.....	c14	N73-20477	US-PATENT-APPI-SN-159804	.....	c11	N70-38196
US-PATENT-APPL-SN-129071	.....	c09	N72-25254	US-PATENT-APPI-SN-159857	.....	c05	N73-26072
US-PATENT-APPL-SN-129072	.....	c15	N73-13467	US-PATENT-APPI-SN-159857	.....	c52	N76-30793
US-PATENT-APPL-SN-129073	.....	c15	N73-13464	US-PATENT-APPI-SN-159966	.....	c31	N73-26876
US-PATENT-APEL-SN-129579	.....	c28	N70-35381	US-PATENT-APPL-SN-160859	.....	c32	N73-26910
US-PATENT-APPL-SN-130353	.....	c31	N73-14853	US-PATENT-APPI-SN-160860	.....	c18	N73-32437
US-PATENT-APEI-SN-134478	.....	c22	N70-34572	US-PATENT-APPL-SN-161028	.....	c14	N73-19420
US-PATENT-APPL-SN-134479	.....	c14	N70-33179	US-PATENT-APPL-SN-162100	.....	c33	N74-14949
US-PATENT-APPL-SN-134481	.....	c11	N70-34815	US-PATENT-APPL-SN-162101	.....	c14	N73-24473
US-PATENT-APPL-SN-134567	.....	c14	N73-16484	US-PATENT-APPL-SN-162230	.....	c26	N72-28761
US-PATENT-APPL-SN-134568	.....	c06	N72-31141	US-PATENT-APPL-SN-162380	.....	c36	N74-21091
US-PATENT-APPL-SN-134571	.....	c21	N73-13644	US-PATENT-APPL-SN-163151	.....	c74	N75-25706
US-PATENT-APEI-SN-134573	.....	c09	N72-25257	US-PATENT-APPL-SN-163152	.....	c17	N73-27446
US-PATENT-APEL-SN-134658	.....	c15	N73-28515	US-PATENT-APPL-SN-164428	.....	c09	N70-35440
US-PATENT-APPL-SN-134782	.....	c09	N70-36494	US-PATENT-APEI-SN-166487	.....	c11	N73-32152
US-PATENT-APEI-SN-136006	.....	c09	N72-28225	US-PATENT-APPL-SN-166541	.....	c14	N73-13415
US-PATENT-APEI-SN-136007	.....	c09	N71-34212	US-PATENT-APPL-SN-166969	.....	c15	N70-34249
US-PATENT-APPL-SN-136008	.....	c27	N74-13270	US-PATENT-APPL-SN-166970	.....	c15	N70-36409
US-PATENT-APPL-SN-136085	.....	c17	N73-12547	US-PATENT-APPL-SN-167719	.....	c16	N73-33397
US-PATENT-APEI-SN-136086	.....	c15	N73-19457	US-PATENT-APPL-SN-168560	.....	c02	N70-34856
US-PATENT-APPL-SN-136253	.....	c27	N74-12814	US-PATENT-APPL-SN-168650	.....	c14	N73-13416
US-PATENT-APPL-SN-137391	.....	c36	N75-31426	US-PATENT-APPL-SN-169671	.....	c10	N73-30205
US-PATENT-APPL-SN-137912	.....	c06	N72-21105	US-PATENT-APPL-SN-169962	.....	c34	N74-30608
US-PATENT-APPL-SN-138227	.....	c26	N72-27784	US-PATENT-APPL-SN-169977	.....	c14	N70-34794
US-PATENT-APPL-SN-138229	.....	c15	N72-32487	US-PATENT-APPL-SN-170440	.....	c15	N73-13462
US-PATENT-APPL-SN-138230	.....	c32	N73-20740	US-PATENT-APPL-SN-170544	.....	c36	N77-19476
US-PATENT-APEL-SN-138540	.....	c14	N70-36808	US-PATENT-APPL-SN-170680	.....	c34	N74-15652
US-PATENT-APEI-SN-139006	.....	c09	N70-38604	US-PATENT-APPL-SN-170681	.....	c10	N73-25240
US-PATENT-APPL-SN-139007	.....	c28	N70-37245	US-PATENT-APPL-SN-172459	.....	c06	N73-16106
US-PATENT-APEI-SN-139012	.....	c03	N70-38713	US-PATENT-APPL-SN-172807	.....	c07	N73-28012
US-PATENT-APEI-SN-139094	.....	c05	N73-32011	US-PATENT-APPL-SN-173081	.....	c28	N70-36806
US-PATENT-APEI-SN-139250	.....	c04	N73-27052	US-PATENT-APPL-SN-173178	.....	c33	N77-21315
US-PATENT-APEL-SN-139528	.....	c03	N72-25020	US-PATENT-APPL-SN-173185	.....	c23	N73-13660
US-PATENT-APEI-SN-139596	.....	c33	N77-13315	US-PATENT-APPL-SN-173190	.....	c05	N73-32015
US-PATENT-APEI-SN-140439	.....	c33	N75-19518	US-PATENT-APPL-SN-173981	.....	c14	N70-35666
US-PATENT-APEL-SN-140443	.....	c09	N70-35219	US-PATENT-APPL-SN-174684	.....	c33	N75-31331
US-PATENT-APPL-SN-140509	.....	c09	N70-35382	US-PATENT-APPL-SN-175267	.....	c14	N73-28486
US-PATENT-APPL-SN-140946	.....	c18	N73-26572	US-PATENT-APPL-SN-175497	.....	c08	N73-28045
US-PATENT-APPL-SN-140946	.....	c27	N74-27037	US-PATENT-APPL-SN-175852	.....	c25	N73-25760
US-PATENT-APPL-SN-141220	.....	c33	N70-37979	US-PATENT-APPL-SN-175881	.....	c09	N73-15245
US-PATENT-APEI-SN-142662	.....	c23	N73-13661	US-PATENT-APPL-SN-175981	.....	c16	N73-30476
US-PATENT-APEL-SN-142719	.....	c14	N73-14429	US-PATENT-APPL-SN-175983	.....	c31	N73-32750
US-PATENT-APPL-SN-143078	.....	c08	N72-33172	US-PATENT-APPL-SN-177684	.....	c28	N70-34860
US-PATENT-APEI-SN-143508	.....	c33	N74-12913	US-PATENT-APPL-SN-177753	.....	c07	N72-20154
US-PATENT-APEI-SN-144139	.....	c11	N73-26238	US-PATENT-APPL-SN-177985	.....	c35	N74-15831
US-PATENT-APPL-SN-144803	.....	c11	N70-34844	US-PATENT-APPL-SN-178213	.....	c25	N70-33267
US-PATENT-APPL-SN-144804	.....	c14	N70-39898	US-PATENT-APPL-SN-178215	.....	c25	N70-34661
US-PATENT-APEI-SN-145007	.....	c18	N70-36400	US-PATENT-APPL-SN-178721	.....	c03	N70-35408
US-PATENT-APEI-SN-145026	.....	c06	N72-25152	US-PATENT-APPL-SN-178771	.....	c23	N75-14834
US-PATENT-APEL-SN-145027	.....	c06	N73-32029	US-PATENT-APPL-SN-180370	.....	c28	N70-33375
US-PATENT-APPL-SN-146935	.....	c14	N73-20475	US-PATENT-APPL-SN-180374	.....	c28	N70-38181
US-PATENT-APPL-SN-146939	.....	c73	N75-30876	US-PATENT-APPL-SN-180377	.....	c15	N70-36908
US-PATENT-APPL-SN-146940	.....	c05	N73-32014	US-PATENT-APPL-SN-180379	.....	c21	N70-35395
US-PATENT-APEL-SN-147099	.....	c14	N73-13417	US-PATENT-APPL-SN-180380	.....	c09	N70-38998
US-PATENT-APEI-SN-147103	.....	c10	N73-20253	US-PATENT-APPL-SN-180381	.....	c21	N70-35089
US-PATENT-APEL-SN-147922	.....	c28	N73-19793	US-PATENT-APPL-SN-180382	.....	c28	N70-38645
US-PATENT-APEL-SN-147940	.....	c14	N72-10375	US-PATENT-APPL-SN-180384	.....	c11	N70-38675
US-PATENT-APEI-SN-147996	.....	c28	N73-24784	US-PATENT-APPL-SN-180391	.....	c28	N70-38249
US-PATENT-APPL-SN-147997	.....	c15	N72-33477	US-PATENT-APPL-SN-180392	.....	c09	N71-13530
US-PATENT-APPL-SN-148001	.....	c14	N70-34298	US-PATENT-APPL-SN-180394	.....	c15	N70-38603
US-PATENT-APEL-SN-148756	.....	c15	N73-13466	US-PATENT-APPL-SN-180395	.....	c15	N70-36947
US-PATENT-APPL-SN-149283	.....	c35	N74-17153	US-PATENT-APPL-SN-180396	.....	c11	N70-38202
US-PATENT-APPL-SN-150215	.....	c33	N73-25952	US-PATENT-APPL-SN-180473	.....	c28	N73-27699

NUMBER INDEX

US-PATENT-APPL-SN-180683	c10	N73-25241	US-PATENT-APPL-SN-202750	c19	N74-21015
US-PATENT-APPL-SN-180962	c14	N72-21433	US-PATENT-APPL-SN-202765	c05	N73-27941
US-PATENT-APPL-SN-180963	c14	N73-27378	US-PATENT-APPL-SN-203271	c51	N74-15778
US-PATENT-APPL-SN-181023	c15	N73-26472	US-PATENT-APPL-SN-203405	c02	N73-26006
US-PATENT-APPL-SN-181024	c07	N73-26117	US-PATENT-APPL-SN-203409	c28	N70-38197
US-PATENT-APPL-SN-181828	c02	N70-34858	US-PATENT-APPL-SN-203411	c33	N70-34812
US-PATENT-APPL-SN-181829	c31	N70-38010	US-PATENT-APPL-SN-204015	c09	N70-38201
US-PATENT-APPL-SN-182033	c33	N73-27796	US-PATENT-APPL-SN-205047	c15	N73-42360
US-PATENT-APPL-SN-182399	c07	N73-28013	US-PATENT-APPL-SN-205470	c08	N71-18752
US-PATENT-APPL-SN-182692	c15	N70-36535	US-PATENT-APPL-SN-205675	c14	N73-30386
US-PATENT-APPL-SN-182696	c21	N70-36938	US-PATENT-APPL-SN-206266	c76	N74-26329
US-PATENT-APPL-SN-182698	c15	N70-38620	US-PATENT-APPL-SN-206266	c76	N75-25730
US-PATENT-APPL-SN-182699	c28	N70-38504	US-PATENT-APPL-SN-206279	c02	N73-26005
US-PATENT-APPL-SN-182977	c39	N74-13131	US-PATENT-APPL-SN-206279	c05	N76-29217
US-PATENT-APPL-SN-182978	c16	N73-13489	US-PATENT-APPL-SN-206698	c15	N73-30459
US-PATENT-APPL-SN-183240	c06	N73-30098	US-PATENT-APPL-SN-207211	c07	N73-30113
US-PATENT-APPL-SN-183377	c28	N70-38505	US-PATENT-APPL-SN-209478	c07	N70-38200
US-PATENT-APPL-SN-183378	c15	N70-38020	US-PATENT-APPL-SN-209479	c15	N70-34850
US-PATENT-APPL-SN-184090	c14	N73-32327	US-PATENT-APPL-SN-209535	c28	N73-24783
US-PATENT-APPL-SN-184649	c07	N70-36911	US-PATENT-APPL-SN-209618	c33	N75-19520
US-PATENT-APPL-SN-184960	c06	N73-27980	US-PATENT-APPL-SN-209618	c33	N75-25041
US-PATENT-APPL-SN-186700	c32	N74-12912	US-PATENT-APPL-SN-209801	c08	N70-40125
US-PATENT-APPL-SN-187143	c36	N74-13205	US-PATENT-APPL-SN-209802	c09	N73-14215
US-PATENT-APPL-SN-187262	c15	N73-27406	US-PATENT-APPL-SN-211332	c02	N74-10034
US-PATENT-APPL-SN-187365	c35	N74-15127	US-PATENT-APPL-SN-211411	c11	N73-20267
US-PATENT-APPL-SN-187446	c31	N70-37924	US-PATENT-APPL-SN-211464	c28	N70-36910
US-PATENT-APPL-SN-188594	c15	N70-34967	US-PATENT-APPL-SN-212010	c14	N72-20394
US-PATENT-APPL-SN-188836	c14	N72-21432	US-PATENT-APPL-SN-212028	c09	N73-14214
US-PATENT-APPL-SN-188836	c35	N74-34857	US-PATENT-APPL-SN-212165	c14	N73-25460
US-PATENT-APPL-SN-188927	c08	N73-32081	US-PATENT-APPL-SN-212173	c02	N71-13421
US-PATENT-APPL-SN-188928	c37	N74-13178	US-PATENT-APPL-SN-212174	c15	N70-34859
US-PATENT-APPL-SN-189290	c14	N73-27379	US-PATENT-APPL-SN-212496	c03	N70-36803
US-PATENT-APPL-SN-189375	c18	N73-14584	US-PATENT-APPL-SN-212497	c11	N71-28779
US-PATENT-APPL-SN-189438	c35	N76-15431	US-PATENT-APPL-SN-212900	c14	N73-25462
US-PATENT-APPL-SN-189648	c32	N70-36536	US-PATENT-APPL-SN-212921	c07	N73-20176
US-PATENT-APPL-SN-190316	c17	N73-32414	US-PATENT-APPL-SN-212977	c15	N73-30460
US-PATENT-APPL-SN-191301	c25	N74-12813	US-PATENT-APPL-SN-213004	c14	N73-19421
US-PATENT-APPL-SN-192016	c03	N70-36778	US-PATENT-APPL-SN-213836	c15	N70-38601
US-PATENT-APPL-SN-192101	c10	N73-20254	US-PATENT-APPL-SN-213949	c07	N73-20175
US-PATENT-APPL-SN-192141	c07	N73-24176	US-PATENT-APPL-SN-214006	c37	N74-18126
US-PATENT-APPL-SN-192803	c07	N73-22076	US-PATENT-APPL-SN-214084	c37	N74-18123
US-PATENT-APPL-SN-192803	c35	N76-16391	US-PATENT-APPL-SN-214086	c14	N73-30395
US-PATENT-APPL-SN-192970	c23	N73-30665	US-PATENT-APPL-SN-214089	c35	N74-21018
US-PATENT-APPL-SN-193456	c10	N73-25243	US-PATENT-APPL-SN-216710	c12	N70-38997
US-PATENT-APPL-SN-193671	c15	N73-12488	US-PATENT-APPL-SN-216711	c03	N70-34157
US-PATENT-APPL-SN-193672	c54	N74-14845	US-PATENT-APPL-SN-216939	c14	N70-40400
US-PATENT-APPL-SN-193814	c14	N73-30393	US-PATENT-APPL-SN-217213	c37	N74-11301
US-PATENT-APPL-SN-193947	c14	N73-13420	US-PATENT-APPL-SN-218965	c10	N73-32145
US-PATENT-APPL-SN-193980	c31	N74-13177	US-PATENT-APPL-SN-219435	c24	N74-27035
US-PATENT-APPL-SN-195061	c05	N73-25125	US-PATENT-APPL-SN-219436	c15	N72-21489
US-PATENT-APPL-SN-195346	c15	N70-36492	US-PATENT-APPL-SN-219590	c06	N73-32030
US-PATENT-APPL-SN-195347	c31	N70-34135	US-PATENT-APPL-SN-219722	c21	N72-21631
US-PATENT-APPL-SN-196399	c07	N73-25161	US-PATENT-APPL-SN-219722	c03	N75-30132
US-PATENT-APPL-SN-196858	c38	N74-15130	US-PATENT-APPL-SN-219806	c07	N74-28226
US-PATENT-APPL-SN-196931	c35	N74-17885	US-PATENT-APPL-SN-220251	c37	N74-15125
US-PATENT-APPL-SN-196970	c15	N73-33383	US-PATENT-APPL-SN-220274	c31	N72-20840
US-PATENT-APPL-SN-197183	c02	N76-22154	US-PATENT-APPL-SN-220274	c18	N74-22136
US-PATENT-APPL-SN-197548	c09	N70-34502	US-PATENT-APPL-SN-220785	c85	N74-34672
US-PATENT-APPL-SN-197551	c31	N70-34296	US-PATENT-APPL-SN-221093	c17	N73-32415
US-PATENT-APPL-SN-197553	c08	N70-34778	US-PATENT-APPL-SN-221276	c14	N70-41955
US-PATENT-APPL-SN-197554	c14	N70-35368	US-PATENT-APPL-SN-221637	c26	N70-36805
US-PATENT-APPL-SN-197689	c31	N74-14133	US-PATENT-APPL-SN-221670	c35	N77-14408
US-PATENT-APPL-SN-197689	c31	N75-13111	US-PATENT-APPL-SN-221685	c35	N74-21062
US-PATENT-APPL-SN-197870	c14	N73-32322	US-PATENT-APPL-SN-221714	c09	N73-32110
US-PATENT-APPL-SN-198285	c09	N73-13208	US-PATENT-APPL-SN-221833	c09	N73-27150
US-PATENT-APPL-SN-198289	c14	N73-32326	US-PATENT-APPL-SN-221945	c31	N70-36410
US-PATENT-APPL-SN-198355	c05	N72-15098	US-PATENT-APPL-SN-223003	c33	N70-36846
US-PATENT-APPL-SN-198362	c14	N73-28489	US-PATENT-APPL-SN-223560	c10	N73-32144
US-PATENT-APPL-SN-198379	c15	N73-32359	US-PATENT-APPL-SN-224489	c31	N74-18089
US-PATENT-APPL-SN-198472	c27	N74-12812	US-PATENT-APPL-SN-226476	c10	N73-32143
US-PATENT-APPL-SN-198763	c31	N74-18124	US-PATENT-APPL-SN-226477	c74	N74-27866
US-PATENT-APPL-SN-198763	c31	N74-32920	US-PATENT-APPL-SN-226551	c06	N73-26100
US-PATENT-APPL-SN-198885	c05	N73-27062	US-PATENT-APPL-SN-227682	c14	N70-34161
US-PATENT-APPL-SN-199199	c25	N71-29184	US-PATENT-APPL-SN-227683	c02	N70-36804
US-PATENT-APPL-SN-199202	c14	N70-40239	US-PATENT-APPL-SN-227692	c14	N70-40003
US-PATENT-APPL-SN-199957	c10	N73-26229	US-PATENT-APPL-SN-227977	c25	N76-18245
US-PATENT-APPL-SN-200040	c52	N74-10975	US-PATENT-APPL-SN-228150	c05	N73-32013
US-PATENT-APPL-SN-200085	c26	N73-26751	US-PATENT-APPL-SN-228163	c44	N74-19693
US-PATENT-APPL-SN-200682	c07	N73-14130	US-PATENT-APPL-SN-228189	c35	N74-11283
US-PATENT-APPL-SN-200717	c09	N73-19234	US-PATENT-APPL-SN-228190	c23	N73-30666
US-PATENT-APPL-SN-200762	c03	N73-20040	US-PATENT-APPL-SN-228229	c27	N77-31308
US-PATENT-APPL-SN-201700	c33	N74-17930	US-PATENT-APPL-SN-228507	c11	N70-38182
US-PATENT-APPL-SN-201782	c15	N73-19458	US-PATENT-APPL-SN-228569	c14	N71-16014
US-PATENT-APPL-SN-201904	c15	N73-30458	US-PATENT-APPL-SN-228707	c25	N71-15650
US-PATENT-APPL-SN-201904	c37	N74-15128	US-PATENT-APPL-SN-229128	c14	N73-28490
US-PATENT-APPL-SN-201904	c37	N74-21064	US-PATENT-APPL-SN-229143	c09	N72-21248
US-PATENT-APPL-SN-202024	c14	N70-34156	US-PATENT-APPL-SN-229143	c33	N77-26387
US-PATENT-APPL-SN-202029	c11	N70-34786	US-PATENT-APPL-SN-229286	c33	N71-29052
US-PATENT-APPL-SN-202030	c31	N71-10747	US-PATENT-APPL-SN-229354	c62	N74-14920

NUMBER INDEX

US-PATENT-APEL-SN-229413	c14	N73-32323	US-PATENT-APPL-SN-251752	c24	N74-30001
US-PATENT-APEL-SN-229516	c46	N74-13011	US-PATENT-APPL-SN-252259	c33	N70-34545
US-PATENT-APEL-SN-231520	c27	N71-29155	US-PATENT-APPL-SN-253006	c22	N70-34248
US-PATENT-APPL-SN-231604	c28	N70-39925	US-PATENT-APPL-SN-253249	c33	N74-11050
US-PATENT-APPL-SN-231662	c14	N73-30392	US-PATENT-APPL-SN-253405	c10	N73-26228
US-PATENT-APPL-SN-232021	c04	N74-13420	US-PATENT-APPL-SN-253725	c35	N74-13129
US-PATENT-APPL-SN-232318	c11	N7-15960	US-PATENT-APPL-SN-253774	c25	N70-36946
US-PATENT-APPL-SN-232914	c15	N70-36412	US-PATENT-APPL-SN-254173	c35	N75-13213
US-PATENT-APPL-SN-233098	c12	N73-25262	US-PATENT-APPL-SN-254177	c10	N73-26230
US-PATENT-APPL-SN-233173	c12	N73-28144	US-PATENT-APPL-SN-254323	c35	N76-15434
US-PATENT-APPL-SN-233519	c20	N74-13502	US-PATENT-APPL-SN-254847	c15	N71-22874
US-PATENT-APPL-SN-233587	c16	N72-22520	US-PATENT-APPL-SN-255132	c14	N71-15598
US-PATENT-APPL-SN-233743	c37	N74-13179	US-PATENT-APPL-SN-256317	c52	N74-26626
US-PATENT-APPL-SN-234568	c28	N70-34788	US-PATENT-APPL-SN-256484	c06	N70-34946
US-PATENT-APEL-SN-235162	c08	N71-12501	US-PATENT-APPL-SN-256493	c20	N77-17143
US-PATENT-APPL-SN-235266	c26	N73-32571	US-PATENT-APPL-SN-257346	c15	N70-36901
US-PATENT-APEL-SN-235268	c36	N74-15145	US-PATENT-APPL-SN-258152	c35	N74-15090
US-PATENT-APEL-SN-235269	c09	N73-30181	US-PATENT-APPL-SN-258171	c34	N74-27744
US-PATENT-APPL-SN-235255	c09	N73-30185	US-PATENT-APPL-SN-258331	c03	N73-31988
US-PATENT-APPL-SN-235338	c71	N74-31148	US-PATENT-APPL-SN-258931	c14	N70-40203
US-PATENT-APPL-SN-235588	c28	N71-28928	US-PATENT-APPL-SN-258932	c05	N70-36943
US-PATENT-APPL-SN-235557	c14	N73-27376	US-PATENT-APPL-SN-259467	c33	N70-36847
US-PATENT-APPL-SN-235962	c36	N74-11313	US-PATENT-APPL-SN-260087	c21	N71-21688
US-PATENT-APPL-SN-236052	c14	N72-25428	US-PATENT-APPL-SN-260093	c25	N74-26948
US-PATENT-APPL-SN-236281	c09	N73-20232	US-PATENT-APPL-SN-260241	c74	N74-21304
US-PATENT-APPL-SN-236285	c08	N73-26175	US-PATENT-APPL-SN-261183	c09	N74-30597
US-PATENT-APPL-SN-236748	c14	N70-40157	US-PATENT-APPL-SN-261912	c14	N70-34818
US-PATENT-APPL-SN-236749	c15	N70-40180	US-PATENT-APPL-SN-261917	c09	N70-40272
US-PATENT-APPL-SN-236985	c44	N74-19692	US-PATENT-APPL-SN-261918	c28	N70-41447
US-PATENT-APEL-SN-237029	c09	N73-32108	US-PATENT-APPL-SN-262430	c35	N74-18323
US-PATENT-APPL-SN-237491	c05	N75-12930	US-PATENT-APPL-SN-262596	c14	N71-28958
US-PATENT-APPL-SN-237694	c35	N74-12884	US-PATENT-APPL-SN-262596	c62	N76-31946
US-PATENT-APPL-SN-238047	c33	N74-12951	US-PATENT-APPL-SN-263230	c33	N74-20860
US-PATENT-APPL-SN-238263	c35	N74-10415	US-PATENT-APPL-SN-263498	c34	N74-27859
US-PATENT-APPL-SN-238264	c37	N74-21061	US-PATENT-APPL-SN-263815	c09	N74-17955
US-PATENT-APPL-SN-238264	c37	N74-32921	US-PATENT-APPL-SN-264728	c30	N70-40016
US-PATENT-APPL-SN-238264	c37	N76-15461	US-PATENT-APPL-SN-264729	c33	N70-34540
US-PATENT-APPL-SN-238421	c28	N71-29153	US-PATENT-APPL-SN-264731	c09	N70-41655
US-PATENT-APPL-SN-238826	c28	N77-10213	US-PATENT-APPL-SN-264735	c28	N70-33265
US-PATENT-APPL-SN-239573	c33	N74-10223	US-PATENT-APPL-SN-264736	c28	N70-36802
US-PATENT-APPL-SN-239574	c09	N73-32107	US-PATENT-APPL-SN-266107	c11	N71-15925
US-PATENT-APPL-SN-239575	c09	N74-19528	US-PATENT-APPL-SN-266671	c37	N74-18127
US-PATENT-APPL-SN-239576	c33	N74-14935	US-PATENT-APPL-SN-266820	c07	N74-31270
US-PATENT-APPL-SN-239577	c35	N74-13132	US-PATENT-APPL-SN-266822	c32	N74-10132
US-PATENT-APPL-SN-239803	c70	N74-13436	US-PATENT-APPL-SN-266832	c33	N74-10195
US-PATENT-APPL-SN-240760	c15	N71-16075	US-PATENT-APPL-SN-266866	c33	N73-32818
US-PATENT-APPL-SN-241061	c06	N72-27151	US-PATENT-APPL-SN-266899	c60	N74-12888
US-PATENT-APPL-SN-241061	c06	N73-33076	US-PATENT-APPL-SN-266911	c36	N74-20009
US-PATENT-APPL-SN-241085	c14	N70-40238	US-PATENT-APPL-SN-266912	c32	N74-19788
US-PATENT-APPL-SN-241614	c10	N73-27171	US-PATENT-APPL-SN-266913	c31	N74-23065
US-PATENT-APPL-SN-241615	c09	N73-32111	US-PATENT-APPL-SN-266925	c54	N74-17853
US-PATENT-APPL-SN-242027	c52	N74-12778	US-PATENT-APPL-SN-266927	c24	N72-28714
US-PATENT-APPL-SN-242028	c21	N73-30641	US-PATENT-APPL-SN-266928	c26	N74-10521
US-PATENT-APPL-SN-242662	c74	N74-15095	US-PATENT-APPL-SN-266930	c54	N74-12779
US-PATENT-APPL-SN-243374	c15	N77-10112	US-PATENT-APPL-SN-266940	c32	N74-32598
US-PATENT-APPL-SN-244158	c32	N74-20863	US-PATENT-APPL-SN-266943	c72	N74-19310
US-PATENT-APPL-SN-244440	c21	N73-19630	US-PATENT-APPL-SN-267572	c73	N74-26767
US-PATENT-APPL-SN-244440	c14	N73-32320	US-PATENT-APPL-SN-267768	c70	N74-21300
US-PATENT-APPL-SN-244519	c37	N74-18125	US-PATENT-APPL-SN-267862	c33	N74-21851
US-PATENT-APPL-SN-244523	c31	N73-30829	US-PATENT-APPL-SN-269073	c52	N74-26625
US-PATENT-APPL-SN-244566	c74	N74-20008	US-PATENT-APPL-SN-269212	c07	N71-10775
US-PATENT-APPL-SN-245063	c33	N74-11049	US-PATENT-APPL-SN-269215	c14	N70-41332
US-PATENT-APPL-SN-245279	c25	N74-30502	US-PATENT-APPL-SN-269222	c15	N70-38225
US-PATENT-APPL-SN-245941	c33	N71-17897	US-PATENT-APPL-SN-269450	c36	N76-18427
US-PATENT-APPL-SN-246056	c38	N74-15395	US-PATENT-APPL-SN-270118	c33	N71-17610
US-PATENT-APPL-SN-247055	c37	N74-11300	US-PATENT-APPL-SN-271821	c15	N71-10778
US-PATENT-APPL-SN-247090	c37	N74-18128	US-PATENT-APPL-SN-271822	c15	N71-15967
US-PATENT-APPL-SN-247136	c14	N71-30265	US-PATENT-APPL-SN-271823	c27	N71-28929
US-PATENT-APPL-SN-247419	c14	N70-36907	US-PATENT-APPL-SN-271824	c07	N71-21476
US-PATENT-APPL-SN-247423	c01	N71-13410	US-PATENT-APPL-SN-271951	c35	N74-15092
US-PATENT-APPL-SN-247434	c25	N76-27383	US-PATENT-APPL-SN-273222	c33	N74-27683
US-PATENT-APPL-SN-247434	c25	N76-29379	US-PATENT-APPL-SN-273240	c35	N74-16135
US-PATENT-APPL-SN-247481	c05	N73-26071	US-PATENT-APPL-SN-273515	c35	N75-25122
US-PATENT-APPL-SN-248469	c14	N73-32318	US-PATENT-APPL-SN-273534	c09	N70-38712
US-PATENT-APPL-SN-248471	c31	N74-27902	US-PATENT-APPL-SN-274065	c16	N71-28963
US-PATENT-APPL-SN-248761	c15	N74-27360	US-PATENT-APPL-SN-274348	c60	N76-18800
US-PATENT-APPL-SN-248985	c03	N71-29129	US-PATENT-APPL-SN-274360	c32	N74-20809
US-PATENT-APPL-SN-249537	c14	N71-10797	US-PATENT-APPL-SN-275118	c35	N74-18088
US-PATENT-APPL-SN-249539	c28	N71-15658	US-PATENT-APPL-SN-277402	c22	N70-34501
US-PATENT-APPL-SN-249540	c15	N70-34861	US-PATENT-APPL-SN-277404	c05	N70-39922
US-PATENT-APPL-SN-249542	c28	N70-41576	US-PATENT-APPL-SN-277436	c37	N74-25968
US-PATENT-APPL-SN-250451	c08	N70-34787	US-PATENT-APPL-SN-277833	c03	N70-41580
US-PATENT-APPL-SN-250567	c33	N71-24876	US-PATENT-APPL-SN-277904	c28	N74-27425
US-PATENT-APPL-SN-250766	c07	N73-30115	US-PATENT-APPL-SN-277961	c33	N70-36617
US-PATENT-APPL-SN-250974	c31	N71-15664	US-PATENT-APPL-SN-278790	c15	N70-34664
US-PATENT-APPL-SN-251449	c07	N70-40063	US-PATENT-APPL-SN-279646	c08	N71-21042
US-PATENT-APPL-SN-251451	c09	N70-35425	US-PATENT-APPL-SN-280029	c35	N74-15126
US-PATENT-APPL-SN-251609	c05	N73-30078	US-PATENT-APPL-SN-280030	c15	N73-20535
US-PATENT-APPL-SN-251621	c16	N73-32391	US-PATENT-APPL-SN-280031	c26	N73-26752

NUMBER INDEX

US-PATENT-APPL-SN-280032	c35 N74-15093	US-PATENT-APPL-SN-307269	c24 N71-10560
US-PATENT-APPL-SN-280305	c34 N74-23039	US-PATENT-APPL-SN-307270	c10 N71-16030
US-PATENT-APPL-SN-280362	c14 N71-28935	US-PATENT-APPL-SN-307271	c09 N71-22999
US-PATENT-APPL-SN-280390	c37 N74-15128	US-PATENT-APPL-SN-307714	c03 N76-32140
US-PATENT-APPL-SN-280580	c12 N71-21089	US-PATENT-APPL-SN-307727	c32 N74-20813
US-PATENT-APPL-SN-280776	c14 N70-40273	US-PATENT-APPL-SN-307728	c34 N74-27861
US-PATENT-APPL-SN-280777	c08 N70-41961	US-PATENT-APPL-SN-307729	c31 N74-27900
US-PATENT-APPL-SN-281069	c14 N70-35394	US-PATENT-APPL-SN-308362	c09 N73-12216
US-PATENT-APPL-SN-281875	c25 N74-18551	US-PATENT-APPL-SN-308363	c15 N73-12496
US-PATENT-APPL-SN-281876	c52 N74-20726	US-PATENT-APPL-SN-308918	c27 N71-15634
US-PATENT-APPL-SN-281877	c35 N74-15146	US-PATENT-APPL-SN-309354	c11 N71-15926
US-PATENT-APPL-SN-281908	c25 N75-12086	US-PATENT-APPL-SN-310034	c32 N74-30524
US-PATENT-APPL-SN-282817	c15 N70-40156	US-PATENT-APPL-SN-310193	c33 N74-27682
US-PATENT-APPL-SN-282818	c14 N71-14996	US-PATENT-APPL-SN-310506	c10 N71-16042
US-PATENT-APPL-SN-283502	c37 N74-21060	US-PATENT-APPL-SN-310507	c07 N71-11298
US-PATENT-APPL-SN-284245	c33 N74-17928	US-PATENT-APPL-SN-310611	c32 N74-13929
US-PATENT-APPL-SN-284265	c14 N70-34799	US-PATENT-APPL-SN-310615	c37 N74-27901
US-PATENT-APPL-SN-284266	c15 N71-16077	US-PATENT-APPL-SN-310616	c35 N74-21017
US-PATENT-APPL-SN-284757	c14 N70-34669	US-PATENT-APPL-SN-310624	c33 N74-17929
US-PATENT-APPL-SN-285705	c37 N74-21056	US-PATENT-APPL-SN-311175	c52 N74-22771
US-PATENT-APPL-SN-286620	c15 N71-30028	US-PATENT-APPL-SN-311234	c35 N74-23040
US-PATENT-APPL-SN-287149	c35 N74-32878	US-PATENT-APPL-SN-311387	c23 N71-30027
US-PATENT-APPL-SN-287150	c37 N74-21065	US-PATENT-APPL-SN-312269	c28 N71-14043
US-PATENT-APPL-SN-288847	c33 N74-27862	US-PATENT-APPL-SN-312443	c10 N71-21473
US-PATENT-APPL-SN-288856	c33 N74-20859	US-PATENT-APPL-SN-313132	c28 N70-34175
US-PATENT-APPL-SN-288857	c14 N73-33361	US-PATENT-APPL-SN-313135	c15 N70-35087
US-PATENT-APPL-SN-289017	c37 N74-27905	US-PATENT-APPL-SN-313136	c09 N71-12540
US-PATENT-APPL-SN-289018	c08 N74-30421	US-PATENT-APPL-SN-313381	c35 N74-15091
US-PATENT-APPL-SN-289033	c15 N73-32358	US-PATENT-APPL-SN-314074	c15 N71-16079
US-PATENT-APPL-SN-289033	c37 N74-21055	US-PATENT-APPL-SN-314570	c10 N71-28960
US-PATENT-APPL-SN-289048	c37 N74-21057	US-PATENT-APPL-SN-314572	c14 N71-15992
US-PATENT-APPL-SN-289049	c19 N74-15089	US-PATENT-APPL-SN-314656	c51 N77-25769
US-PATENT-APPL-SN-289050	c20 N74-32919	US-PATENT-APPL-SN-315048	c34 N74-27730
US-PATENT-APPL-SN-290021	c37 N74-23064	US-PATENT-APPL-SN-315065	c33 N74-20862
US-PATENT-APPL-SN-290022	c09 N73-12214	US-PATENT-APPL-SN-315070	c60 N76-23850
US-PATENT-APPL-SN-290030	c33 N74-12887	US-PATENT-APPL-SN-315096	c12 N70-40124
US-PATENT-APPL-SN-290043	c18 N75-27040	US-PATENT-APPL-SN-316477	c18 N71-10772
US-PATENT-APPL-SN-290867	c28 N70-39931	US-PATENT-APPL-SN-316618	c07 N74-15453
US-PATENT-APPL-SN-290868	c31 N70-34966	US-PATENT-APPL-SN-317310	c36 N77-25502
US-PATENT-APPL-SN-290870	c15 N70-38996	US-PATENT-APPL-SN-317389	c18 N70-41583
US-PATENT-APPL-SN-290873	c10 N71-16058	US-PATENT-APPL-SN-317391	c15 N71-15968
US-PATENT-APPL-SN-290915	c32 N74-11000	US-PATENT-APPL-SN-317567	c36 N75-15029
US-PATENT-APPL-SN-291845	c52 N74-27566	US-PATENT-APPL-SN-318151	c75 N74-30156
US-PATENT-APPL-SN-292382	c27 N74-17283	US-PATENT-APPL-SN-318152	c52 N74-20728
US-PATENT-APPL-SN-292477	c15 N73-12495	US-PATENT-APPL-SN-318357	c35 N74-21019
US-PATENT-APPL-SN-292596	c10 N71-29135	US-PATENT-APPL-SN-318358	c27 N74-27037
US-PATENT-APPL-SN-292681	c33 N74-10194	US-PATENT-APPL-SN-318443	c03 N70-34667
US-PATENT-APPL-SN-292682	c14 N73-32319	US-PATENT-APPL-SN-318848	c35 N77-14408
US-PATENT-APPL-SN-292685	c32 N74-20864	US-PATENT-APPL-SN-319150	c33 N75-15919
US-PATENT-APPL-SN-292686	c20 N74-31269	US-PATENT-APPL-SN-319410	c37 N74-20063
US-PATENT-APPL-SN-292698	c09 N73-32109	US-PATENT-APPL-SN-319892	c07 N71-10609
US-PATENT-APPL-SN-293725	c89 N74-30886	US-PATENT-APPL-SN-319893	c14 N70-41647
US-PATENT-APPL-SN-293726	c37 N74-21055	US-PATENT-APPL-SN-319894	c03 N71-11053
US-PATENT-APPL-SN-293727	c33 N74-14956	US-PATENT-APPL-SN-319905	c14 N71-10781
US-PATENT-APPL-SN-293739	c35 N74-28097	US-PATENT-APPL-SN-320233	c33 N71-15625
US-PATENT-APPL-SN-294727	c73 N77-18891	US-PATENT-APPL-SN-320595	c26 N70-40015
US-PATENT-APPL-SN-295855	c23 N71-17802	US-PATENT-APPL-SN-321179	c27 N74-21156
US-PATENT-APPL-SN-296622	c44 N76-31666	US-PATENT-APPL-SN-321179	c27 N76-32315
US-PATENT-APPL-SN-296879	c26 N71-18064	US-PATENT-APPL-SN-321180	c05 N76-29217
US-PATENT-APPL-SN-297127	c33 N74-27705	US-PATENT-APPL-SN-321656	c14 N70-41807
US-PATENT-APPL-SN-297128	c32 N74-26654	US-PATENT-APPL-SN-322545	c14 N71-10774
US-PATENT-APPL-SN-298156	c37 N75-13261	US-PATENT-APPL-SN-322565	c37 N75-27376
US-PATENT-APPL-SN-298156	c26 N75-19408	US-PATENT-APPL-SN-322997	c37 N75-15992
US-PATENT-APPL-SN-298157	c33 N74-21850	US-PATENT-APPL-SN-322998	c35 N74-32877
US-PATENT-APPL-SN-298799	c14 N71-15962	US-PATENT-APPL-SN-323182	c03 N70-41864
US-PATENT-APPL-SN-298800	c14 N70-34705	US-PATENT-APPL-SN-324029	c32 N74-27612
US-PATENT-APPL-SN-299042	c15 N71-15918	US-PATENT-APPL-SN-325784	c24 N76-14204
US-PATENT-APPL-SN-300113	c33 N70-33344	US-PATENT-APPL-SN-326198	c35 N75-12272
US-PATENT-APPL-SN-300712	c15 N70-35407	US-PATENT-APPL-SN-326298	c14 N71-22765
US-PATENT-APPL-SN-300957	c33 N71-29053	US-PATENT-APPL-SN-326299	c26 N71-17818
US-PATENT-APPL-SN-301039	c37 N74-27903	US-PATENT-APPL-SN-326326	c35 N74-32879
US-PATENT-APPL-SN-301417	c71 N74-21014	US-PATENT-APPL-SN-326327	c44 N74-27519
US-PATENT-APPL-SN-301418	c52 N76-29894	US-PATENT-APPL-SN-326364	c51 N75-13502
US-PATENT-APPL-SN-301419	c34 N76-17317	US-PATENT-APPL-SN-327163	c03 N71-20895
US-PATENT-APPL-SN-301683	c07 N71-15907	US-PATENT-APPL-SN-327565	c02 N70-36825
US-PATENT-APPL-SN-302681	c37 N75-12326	US-PATENT-APPL-SN-327921	c54 N75-13531
US-PATENT-APPL-SN-302720	c02 N73-13023	US-PATENT-APPL-SN-327969	c35 N75-13213
US-PATENT-APPL-SN-302749	c14 N70-40201	US-PATENT-APPL-SN-328140	c18 N71-21651
US-PATENT-APPL-SN-304430	c52 N74-27864	US-PATENT-APPL-SN-328792	c35 N75-12273
US-PATENT-APPL-SN-304698	c32 N70-41579	US-PATENT-APPL-SN-329237	c33 N74-34638
US-PATENT-APPL-SN-304705	c32 N74-20810	US-PATENT-APPL-SN-329243	c28 N74-33209
US-PATENT-APPL-SN-304749	c11 N71-16028	US-PATENT-APPL-SN-329331	c15 N71-15906
US-PATENT-APPL-SN-305012	c35 N74-15094	US-PATENT-APPL-SN-329595	c05 N70-41325
US-PATENT-APPL-SN-305013	c14 N73-13435	US-PATENT-APPL-SN-329958	c33 N74-22885
US-PATENT-APPL-SN-305020	c21 N70-34295	US-PATENT-APPL-SN-330209	c15 N70-41646
US-PATENT-APPL-SN-305638	c34 N74-23066	US-PATENT-APPL-SN-330210	c14 N71-21090
US-PATENT-APPL-SN-305639	c37 N74-27904	US-PATENT-APPL-SN-331323	c07 N71-16088
US-PATENT-APPL-SN-306652	c33 N74-32712	US-PATENT-APPL-SN-331324	c05 N70-35152
US-PATENT-APPL-SN-306980	c07 N73-24187	US-PATENT-APPL-SN-331759	c28 N73-19819

NUMBER INDEX

US-PATENT-APPL-SN-331759	c07 N76-18117	US-PATENT-APPL-SN-356664	c31 N75-12161
US-PATENT-APPL-SN-331760	c35 N74-27860	US-PATENT-APPL-SN-356692	c15 N70-41371
US-PATENT-APPL-SN-332313	c21 N71-10678	US-PATENT-APPL-SN-357126	c35 N74-34857
US-PATENT-APPL-SN-332339	c07 N71-11284	US-PATENT-APPL-SN-357312	c27 N76-16229
US-PATENT-APPL-SN-333766	c31 N71-15663	US-PATENT-APPL-SN-357334	c03 N71-12258
US-PATENT-APPL-SN-333770	c21 N71-15583	US-PATENT-APPL-SN-357336	c03 N71-12259
US-PATENT-APPL-SN-333912	c32 N74-19790	US-PATENT-APPL-SN-357337	c15 N71-10782
US-PATENT-APPL-SN-334349	c35 N75-19611	US-PATENT-APPL-SN-357340	c23 N71-15673
US-PATENT-APPL-SN-334672	c14 N70-41330	US-PATENT-APPL-SN-358127	c05 N71-12335
US-PATENT-APPL-SN-334678	c11 N71-10777	US-PATENT-APPL-SN-359039	c32 N74-30523
US-PATENT-APPL-SN-335201	c33 N74-17927	US-PATENT-APPL-SN-359156	c14 N75-24794
US-PATENT-APPL-SN-335441	c14 N71-23268	US-PATENT-APPL-SN-359157	c35 N74-18090
US-PATENT-APPL-SN-336103	c16 N71-15550	US-PATENT-APPL-SN-359532	c15 N71-28959
US-PATENT-APPL-SN-336319	c44 N74-33379	US-PATENT-APPL-SN-359957	c07 N74-32418
US-PATENT-APPL-SN-336320	c15 N71-15966	US-PATENT-APPL-SN-359958	c37 N74-26976
US-PATENT-APPL-SN-336607	c10 N71-15910	US-PATENT-APPL-SN-360180	c17 N71-16026
US-PATENT-APPL-SN-336608	c32 N71-17645	US-PATENT-APPL-SN-360182	c31 N70-36654
US-PATENT-APPL-SN-337487	c33 N74-26977	US-PATENT-APPL-SN-360878	c03 N71-11051
US-PATENT-APPL-SN-337816	c35 N75-15931	US-PATENT-APPL-SN-361666	c33 N75-30428
US-PATENT-APPL-SN-338464	c32 N74-20811	US-PATENT-APPL-SN-361906	c33 N74-20861
US-PATENT-APPL-SN-339040	c31 N70-41373	US-PATENT-APPL-SN-361907	c35 N74-27865
US-PATENT-APPL-SN-339806	c07 N74-27490	US-PATENT-APPL-SN-362145	c32 N75-26194
US-PATENT-APPL-SN-339821	c17 N70-33288	US-PATENT-APPL-SN-362146	c33 N75-18479
US-PATENT-APPL-SN-339825	c28 N71-15660	US-PATENT-APPL-SN-362261	c14 N73-34325
US-PATENT-APPL-SN-340113	c16 N70-41578	US-PATENT-APPL-SN-363348	c05 N70-41581
US-PATENT-APPL-SN-340791	c35 N74-26945	US-PATENT-APPL-SN-363653	c07 N70-41331
US-PATENT-APPL-SN-340862	c33 N77-26387	US-PATENT-APPL-SN-363654	c07 N70-41372
US-PATENT-APPL-SN-340863	c25 N76-27383	US-PATENT-APPL-SN-363691	c20 N76-14190
US-PATENT-APPL-SN-340864	c31 N74-21059	US-PATENT-APPL-SN-364867	c09 N71-10673
US-PATENT-APPL-SN-340865	c31 N73-20880	US-PATENT-APPL-SN-365644	c35 N74-26946
US-PATENT-APPL-SN-340871	c44 N74-19870	US-PATENT-APPL-SN-366226	c10 N71-16057
US-PATENT-APPL-SN-341467	c15 N70-39924	US-PATENT-APPL-SN-367267	c02 N73-26008
US-PATENT-APPL-SN-341621	c54 N74-20725	US-PATENT-APPL-SN-367268	c05 N75-25914
US-PATENT-APPL-SN-341662	c08 N74-10942	US-PATENT-APPL-SN-367293	c36 N75-19655
US-PATENT-APPL-SN-342572	c02 N71-16087	US-PATENT-APPL-SN-367294	c76 N75-12810
US-PATENT-APPL-SN-342574	c03 N71-20904	US-PATENT-APPL-SN-367606	c75 N75-13625
US-PATENT-APPL-SN-343308	c19 N74-29410	US-PATENT-APPL-SN-367606	c75 N76-17951
US-PATENT-APPL-SN-343425	c11 N70-35383	US-PATENT-APPL-SN-368123	c09 N71-10618
US-PATENT-APPL-SN-343426	c07 N71-20814	US-PATENT-APPL-SN-369334	c21 N71-22880
US-PATENT-APPL-SN-343607	c18 N74-27397	US-PATENT-APPL-SN-369336	c09 N71-10659
US-PATENT-APPL-SN-343760	c07 N71-28979	US-PATENT-APPL-SN-369337	c15 N70-41811
US-PATENT-APPL-SN-344410	c07 N74-33218	US-PATENT-APPL-SN-369338	c08 N71-28925
US-PATENT-APPL-SN-344793	c03 N71-11058	US-PATENT-APPL-SN-369640	c32 N70-41370
US-PATENT-APPL-SN-345372	c33 N74-22814	US-PATENT-APPL-SN-370134	c30 N70-40353
US-PATENT-APPL-SN-346356	c14 N70-41676	US-PATENT-APPL-SN-370135	c11 N70-41677
US-PATENT-APPL-SN-346361	c37 N74-21064	US-PATENT-APPL-SN-370255	c33 N75-18477
US-PATENT-APPL-SN-346372	c35 N75-12270	US-PATENT-APPL-SN-370271	c32 N75-24981
US-PATENT-APPL-SN-346483	c37 N74-32921	US-PATENT-APPL-SN-370581	c27 N73-27695
US-PATENT-APPL-SN-346483	c37 N76-15461	US-PATENT-APPL-SN-370582	c18 N76-14186
US-PATENT-APPL-SN-347101	c09 N70-41675	US-PATENT-APPL-SN-370872	c37 N74-32918
US-PATENT-APPL-SN-347626	c15 N70-40204	US-PATENT-APPL-SN-370989	c23 N71-29049
US-PATENT-APPL-SN-347952	c37 N75-13265	US-PATENT-APPL-SN-370999	c23 N73-32538
US-PATENT-APPL-SN-347953	c05 N75-24716	US-PATENT-APPL-SN-371322	c44 N76-14600
US-PATENT-APPL-SN-347960	c03 N70-39930	US-PATENT-APPL-SN-371856	c15 N70-42033
US-PATENT-APPL-SN-348422	c27 N76-15311	US-PATENT-APPL-SN-371857	c07 N70-41680
US-PATENT-APPL-SN-348600	c28 N71-29154	US-PATENT-APPL-SN-372143	c15 N73-27407
US-PATENT-APPL-SN-348787	c33 N75-19521	US-PATENT-APPL-SN-372148	c35 N74-26949
US-PATENT-APPL-SN-349778	c09 N70-40234	US-PATENT-APPL-SN-372149	c37 N75-15050
US-PATENT-APPL-SN-349781	c31 N71-15647	US-PATENT-APPL-SN-372438	c30 N71-17788
US-PATENT-APPL-SN-349782	c09 N71-16086	US-PATENT-APPL-SN-372648	c27 N71-16348
US-PATENT-APPL-SN-350249	c36 N75-15028	US-PATENT-APPL-SN-372727	c31 N70-36845
US-PATENT-APPL-SN-350250	c27 N75-27160	US-PATENT-APPL-SN-372730	c28 N71-28850
US-PATENT-APPL-SN-350300	c31 N74-32920	US-PATENT-APPL-SN-373587	c33 N74-32711
US-PATENT-APPL-SN-351259	c15 N71-10672	US-PATENT-APPL-SN-373588	c33 N75-19515
US-PATENT-APPL-SN-351929	c33 N75-14957	US-PATENT-APPL-SN-373591	c31 N71-15692
US-PATENT-APPL-SN-351950	c33 N75-27249	US-PATENT-APPL-SN-374421	c27 N76-24405
US-PATENT-APPL-SN-352381	c20 N75-18310	US-PATENT-APPL-SN-374422	c32 N75-24982
US-PATENT-APPL-SN-352381	c37 N76-14461	US-PATENT-APPL-SN-374423	c36 N75-31427
US-PATENT-APPL-SN-352382	c60 N75-13539	US-PATENT-APPL-SN-374424	c74 N75-12732
US-PATENT-APPL-SN-352383	c35 N75-16783	US-PATENT-APPL-SN-374441	c35 N75-19616
US-PATENT-APPL-SN-352400	c26 N71-10607	US-PATENT-APPL-SN-374583	c33 N74-29556
US-PATENT-APPL-SN-353162	c33 N75-26243	US-PATENT-APPL-SN-375401	c17 N71-16025
US-PATENT-APPL-SN-353632	c15 N71-13789	US-PATENT-APPL-SN-375405	c31 N71-15675
US-PATENT-APPL-SN-353634	c15 N70-41829	US-PATENT-APPL-SN-375674	c28 N70-41582
US-PATENT-APPL-SN-353637	c02 N70-34160	US-PATENT-APPL-SN-375680	c10 N71-28739
US-PATENT-APPL-SN-353644	c07 N71-23098	US-PATENT-APPL-SN-375682	c31 N70-41588
US-PATENT-APPL-SN-353645	c15 N71-15922	US-PATENT-APPL-SN-376258	c22 N73-28660
US-PATENT-APPL-SN-354060	c74 N76-19935	US-PATENT-APPL-SN-377146	c14 N71-23041
US-PATENT-APPL-SN-354182	c10 N71-20841	US-PATENT-APPL-SN-377177	c32 N70-42003
US-PATENT-APPL-SN-354406	c52 N76-14757	US-PATENT-APPL-SN-377780	c11 N71-10604
US-PATENT-APPL-SN-354407	c33 N74-22865	US-PATENT-APPL-SN-377784	c28 N70-41311
US-PATENT-APPL-SN-354408	c35 N75-19614	US-PATENT-APPL-SN-378080	c12 N71-24692
US-PATENT-APPL-SN-354611	c25 N74-26947	US-PATENT-APPL-SN-378126	c44 N76-18643
US-PATENT-APPL-SN-354612	c35 N75-30504	US-PATENT-APPL-SN-378127	c44 N76-18641
US-PATENT-APPL-SN-355126	c17 N71-15644	US-PATENT-APPL-SN-379019	c09 N75-12969
US-PATENT-APPL-SN-355129	c14 N70-41957	US-PATENT-APPL-SN-379049	c31 N75-13111
US-PATENT-APPL-SN-355130	c15 N70-40354	US-PATENT-APPL-SN-379072	c15 N71-16078
US-PATENT-APPL-SN-356488	c08 N71-19544	US-PATENT-APPL-SN-379290	c14 N73-28499
US-PATENT-APPL-SN-356554	c24 N75-33181	US-PATENT-APPL-SN-379417	c02 N70-41863

NUMBER INDEX

US-PATENT-APPL-SN-379768	.....	c28	N71-10780	US-PATENT-APPL-SN-402866	.....	c23	N73-32542
US-PATENT-APPL-SN-379771	.....	c33	N71-28852	US-PATENT-APPL-SN-402867	.....	c35	N75-33367
US-PATENT-APPL-SN-380046	.....	c25	N76-29379	US-PATENT-APPL-SN-402868	.....	c35	N75-19612
US-PATENT-APPL-SN-380630	.....	c37	N75-21631	US-PATENT-APPL-SN-402978	.....	c10	N71-24084
US-PATENT-APPL-SN-380960	.....	c15	N70-41993	US-PATENT-APPL-SN-403154	.....	c37	N77-22480
US-PATENT-APPL-SN-380965	.....	c10	N71-23033	US-PATENT-APPL-SN-403654	.....	c54	N75-12616
US-PATENT-APPL-SN-381940	.....	c09	N71-20705	US-PATENT-APPL-SN-403695	.....	c35	N77-20399
US-PATENT-APPL-SN-382261	.....	c35	N76-14430	US-PATENT-APPL-SN-403959	.....	c14	N70-41994
US-PATENT-APPL-SN-382262	.....	c37	N74-21058	US-PATENT-APPL-SN-403960	.....	c14	N70-41366
US-PATENT-APPL-SN-382976	.....	c15	N71-21179	US-PATENT-APPL-SN-404212	.....	c14	N73-32324
US-PATENT-APPL-SN-384010	.....	c10	N71-28859	US-PATENT-APPL-SN-405341	.....	c37	N76-15460
US-PATENT-APPL-SN-384773	.....	c15	N76-14158	US-PATENT-APPL-SN-405342	.....	c35	N75-19615
US-PATENT-APPL-SN-384811	.....	c15	N71-10809	US-PATENT-APPL-SN-405346	.....	c37	N75-30562
US-PATENT-APPL-SN-385013	.....	c35	N75-19613	US-PATENT-APPL-SN-405629	.....	c09	N71-10677
US-PATENT-APPL-SN-385059	.....	c33	N77-21315	US-PATENT-APPL-SN-405630	.....	c14	N71-10616
US-PATENT-APPL-SN-385520	.....	c14	N71-23037	US-PATENT-APPL-SN-405632	.....	c21	N71-15582
US-PATENT-APPL-SN-385522	.....	c34	N75-33342	US-PATENT-APPL-SN-406097	.....	c14	N71-21088
US-PATENT-APPL-SN-385526	.....	c12	N71-16031	US-PATENT-APPL-SN-406715	.....	c35	N75-15014
US-PATENT-APPL-SN-385527	.....	c31	N71-17729	US-PATENT-APPL-SN-407323	.....	c32	N75-21485
US-PATENT-APPL-SN-385530	.....	c09	N71-10798	US-PATENT-APPL-SN-407595	.....	c28	N70-41992
US-PATENT-APPL-SN-386467	.....	c14	N70-40233	US-PATENT-APPL-SN-407599	.....	c14	N71-21091
US-PATENT-APPL-SN-386789	.....	c35	N75-12271	US-PATENT-APPL-SN-407603	.....	c05	N71-11199
US-PATENT-APPL-SN-386790	.....	c09	N75-12968	US-PATENT-APPL-SN-408435	.....	c15	N71-28937
US-PATENT-APPL-SN-386793	.....	c35	N75-25124	US-PATENT-APPL-SN-408438	.....	c07	N71-22750
US-PATENT-APPL-SN-386800	.....	c15	N71-21404	US-PATENT-APPL-SN-408442	.....	c10	N71-23662
US-PATENT-APPL-SN-387094	.....	c37	N77-19457	US-PATENT-APPL-SN-409126	.....	c18	N71-21068
US-PATENT-APPL-SN-387095	.....	c37	N75-33395	US-PATENT-APPL-SN-409990	.....	c35	N75-27330
US-PATENT-APPL-SN-387266	.....	c35	N75-27328	US-PATENT-APPL-SN-409991	.....	c33	N75-13139
US-PATENT-APPL-SN-387332	.....	c15	N70-33226	US-PATENT-APPL-SN-410325	.....	c18	N71-23088
US-PATENT-APPL-SN-387342	.....	c37	N76-18457	US-PATENT-APPL-SN-410326	.....	c09	N71-21449
US-PATENT-APPL-SN-388023	.....	c10	N70-41964	US-PATENT-APPL-SN-410330	.....	c26	N71-23043
US-PATENT-APPL-SN-388024	.....	c32	N71-17609	US-PATENT-APPL-SN-410331	.....	c02	N70-41589
US-PATENT-APPL-SN-388966	.....	c31	N70-41855	US-PATENT-APPL-SN-410332	.....	c14	N71-23039
US-PATENT-APPL-SN-388967	.....	c10	N71-23271	US-PATENT-APPL-SN-411572	.....	c35	N75-15932
US-PATENT-APPL-SN-389916	.....	c18	N75-27041	US-PATENT-APPL-SN-411944	.....	c15	N70-41629
US-PATENT-APPL-SN-389929	.....	c33	N75-25040	US-PATENT-APPL-SN-411945	.....	c18	N71-23047
US-PATENT-APPL-SN-390049	.....	c37	N76-16446	US-PATENT-APPL-SN-411949	.....	c27	N71-15635
US-PATENT-APPL-SN-390049	.....	c44	N76-29700	US-PATENT-APPL-SN-412079	.....	c37	N75-13266
US-PATENT-APPL-SN-390250	.....	c21	N70-41856	US-PATENT-APPL-SN-412080	.....	c36	N75-19653
US-PATENT-APPL-SN-390251	.....	c07	N71-23026	US-PATENT-APPL-SN-412379	.....	c32	N77-10392
US-PATENT-APPL-SN-390466	.....	c24	N75-13032	US-PATENT-APPL-SN-413661	.....	c15	N71-23024
US-PATENT-APPL-SN-390468	.....	c36	N75-19652	US-PATENT-APPL-SN-413662	.....	c09	N70-41929
US-PATENT-APPL-SN-391343	.....	c05	N69-21473	US-PATENT-APPL-SN-414042	.....	c37	N74-13199
US-PATENT-APPL-SN-392823	.....	c25	N74-33378	US-PATENT-APPL-SN-414043	.....	c27	N76-32315
US-PATENT-APPL-SN-392965	.....	c18	N71-22998	US-PATENT-APPL-SN-414482	.....	c10	N71-10578
US-PATENT-APPL-SN-392969	.....	c09	N71-23573	US-PATENT-APPL-SN-415486	.....	c37	N75-19683
US-PATENT-APPL-SN-392970	.....	c32	N70-41367	US-PATENT-APPL-SN-416135	.....	c32	N75-15854
US-PATENT-APPL-SN-392973	.....	c07	N71-23001	US-PATENT-APPL-SN-416938	.....	c11	N71-10746
US-PATENT-APPL-SN-392992	.....	c15	N71-23052	US-PATENT-APPL-SN-416940	.....	c21	N71-21708
US-PATENT-APPL-SN-393451	.....	c02	N70-42016	US-PATENT-APPL-SN-416941	.....	c31	N70-34159
US-PATENT-APPL-SN-393461	.....	c31	N71-17691	US-PATENT-APPL-SN-416943	.....	c14	N71-23269
US-PATENT-APPL-SN-393464	.....	c23	N71-21821	US-PATENT-APPL-SN-416945	.....	c10	N71-23543
US-PATENT-APPL-SN-393523	.....	c12	N75-24774	US-PATENT-APPL-SN-416946	.....	c28	N71-15563
US-PATENT-APPL-SN-393524	.....	c60	N76-21914	US-PATENT-APPL-SN-417253	.....	c11	N71-23042
US-PATENT-APPL-SN-393525	.....	c31	N74-32917	US-PATENT-APPL-SN-418010	.....	c32	N74-12843
US-PATENT-APPL-SN-393526	.....	c77	N75-20139	US-PATENT-APPL-SN-418362	.....	c14	N71-20741
US-PATENT-APPL-SN-393527	.....	c15	N75-13007	US-PATENT-APPL-SN-418931	.....	c05	N70-42000
US-PATENT-APPL-SN-393528	.....	c36	N75-19654	US-PATENT-APPL-SN-418933	.....	c15	N71-23022
US-PATENT-APPL-SN-394149	.....	c35	N75-25123	US-PATENT-APPL-SN-419319	.....	c34	N76-17317
US-PATENT-APPL-SN-394206	.....	c76	N75-25730	US-PATENT-APPL-SN-419747	.....	c17	N76-21250
US-PATENT-APPL-SN-394207	.....	c31	N74-10476	US-PATENT-APPL-SN-419748	.....	c27	N76-14264
US-PATENT-APPL-SN-394638	.....	c28	N70-34162	US-PATENT-APPL-SN-419831	.....	c35	N75-21582
US-PATENT-APPL-SN-394898	.....	c07	N77-28118	US-PATENT-APPL-SN-419831	.....	c35	N77-17426
US-PATENT-APPL-SN-395348	.....	c15	N71-22713	US-PATENT-APPL-SN-420245	.....	c08	N71-22749
US-PATENT-APPL-SN-395493	.....	c15	N73-32371	US-PATENT-APPL-SN-420250	.....	c15	N71-23051
US-PATENT-APPL-SN-395495	.....	c54	N75-27759	US-PATENT-APPL-SN-420424	.....	c34	N75-26282
US-PATENT-APPL-SN-395687	.....	c37	N75-18573	US-PATENT-APPL-SN-420466	.....	c14	N71-23092
US-PATENT-APPL-SN-395868	.....	c33	N75-19516	US-PATENT-APPL-SN-420813	.....	c36	N75-32441
US-PATENT-APPL-SN-396443	.....	c15	N71-15986	US-PATENT-APPL-SN-421702	.....	c44	N75-32581
US-PATENT-APPL-SN-396444	.....	c10	N71-20782	US-PATENT-APPL-SN-421702	.....	c44	N76-23675
US-PATENT-APPL-SN-397476	.....	c34	N75-12222	US-PATENT-APPL-SN-422092	.....	c14	N71-22989
US-PATENT-APPL-SN-397477	.....	c33	N75-19517	US-PATENT-APPL-SN-422095	.....	c07	N71-10676
US-PATENT-APPL-SN-397478	.....	c52	N75-33640	US-PATENT-APPL-SN-422096	.....	c03	N71-29044
US-PATENT-APPL-SN-397665	.....	c10	N70-41991	US-PATENT-APPL-SN-422097	.....	c11	N71-21481
US-PATENT-APPL-SN-398131	.....	c05	N70-41297	US-PATENT-APPL-SN-422098	.....	c15	N71-22797
US-PATENT-APPL-SN-398132	.....	c15	N70-41808	US-PATENT-APPL-SN-422099	.....	c14	N71-22964
US-PATENT-APPL-SN-398885	.....	c27	N76-15310	US-PATENT-APPL-SN-422100	.....	c14	N71-21040
US-PATENT-APPL-SN-398886	.....	c07	N75-24736	US-PATENT-APPL-SN-422864	.....	c05	N69-21925
US-PATENT-APPL-SN-398901	.....	c37	N75-25186	US-PATENT-APPL-SN-422865	.....	c31	N70-41631
US-PATENT-APPL-SN-399419	.....	c21	N71-23289	US-PATENT-APPL-SN-422867	.....	c15	N70-40062
US-PATENT-APPL-SN-400467	.....	c33	N75-30431	US-PATENT-APPL-SN-422868	.....	c15	N71-10617
US-PATENT-APPL-SN-400613	.....	c15	N71-21528	US-PATENT-APPL-SN-422869	.....	c14	N71-10779
US-PATENT-APPL-SN-400617	.....	c31	N71-17629	US-PATENT-APPL-SN-423412	.....	c08	N71-22897
US-PATENT-APPL-SN-401466	.....	c09	N75-24758	US-PATENT-APPL-SN-424013	.....	c34	N76-27517
US-PATENT-APPL-SN-401919	.....	c24	N76-24363	US-PATENT-APPL-SN-424038	.....	c24	N75-30260
US-PATENT-APPL-SN-401920	.....	c37	N75-25185	US-PATENT-APPL-SN-424153	.....	c15	N71-21234
US-PATENT-APPL-SN-401921	.....	c24	N76-14203	US-PATENT-APPL-SN-424156	.....	c02	N71-23007
US-PATENT-APPL-SN-402365	.....	c31	N71-17730	US-PATENT-APPL-SN-424157	.....	c28	N70-41275
US-PATENT-APPL-SN-402865	.....	c33	N74-32660	US-PATENT-APPL-SN-425096	.....	c05	N71-23080

NUMBER INDEX

US-PATENT-APPL-SN-425362	.....	c15	N71-10658	US-PATENT-APPL-SN-449153	.....	c54	N75-27761
US-PATENT-APPL-SN-425363	.....	c09	N71-20658	US-PATENT-APPL-SN-449901	.....	c28	N70-41967
US-PATENT-APPL-SN-425364	.....	c33	N71-15623	US-PATENT-APPL-SN-449902	.....	c14	N70-41681
US-PATENT-APPL-SN-425365	.....	c32	N71-21045	US-PATENT-APPL-SN-450500	.....	c37	N76-18455
US-PATENT-APPL-SN-425972	.....	c03	N71-23006	US-PATENT-APPL-SN-450502	.....	c37	N76-18456
US-PATENT-APPL-SN-426155	.....	c33	N75-15874	US-PATENT-APPL-SN-450504	.....	c23	N77-17161
US-PATENT-APPL-SN-426405	.....	c25	N75-26043	US-PATENT-APPL-SN-450505	.....	c37	N75-31446
US-PATENT-APPL-SN-426455	.....	c28	N71-15661	US-PATENT-APPL-SN-451596	.....	c17	N71-29137
US-PATENT-APPL-SN-426702	.....	c15	N70-42034	US-PATENT-APPL-SN-452761	.....	c33	N75-19522
US-PATENT-APPL-SN-427355	.....	c54	N75-27760	US-PATENT-APPL-SN-452767	.....	c05	N75-25915
US-PATENT-APPL-SN-427775	.....	c27	N76-22376	US-PATENT-APPL-SN-452768	.....	c52	N76-30793
US-PATENT-APPL-SN-427990	.....	c06	N71-23527	US-PATENT-APPL-SN-452769	.....	c44	N76-16612
US-PATENT-APPL-SN-428444	.....	c44	N76-18642	US-PATENT-APPL-SN-452770	.....	c33	N75-31332
US-PATENT-APPL-SN-428444	.....	c44	N76-29704	US-PATENT-APPL-SN-452944	.....	c18	N71-24183
US-PATENT-APPL-SN-428882	.....	c31	N70-41948	US-PATENT-APPL-SN-452945	.....	c18	N69-39979
US-PATENT-APPL-SN-428887	.....	c33	N71-29051	US-PATENT-APPL-SN-453115	.....	c32	N76-14321
US-PATENT-APPL-SN-428890	.....	c02	N70-41630	US-PATENT-APPL-SN-453225	.....	c15	N71-24833
US-PATENT-APPL-SN-428992	.....	c34	N77-18382	US-PATENT-APPL-SN-453227	.....	c31	N71-10582
US-PATENT-APPL-SN-428993	.....	c45	N75-27585	US-PATENT-APPL-SN-453229	.....	c17	N71-23828
US-PATENT-APPL-SN-428994	.....	c32	N75-21486	US-PATENT-APPL-SN-453231	.....	c23	N71-15467
US-PATENT-APPL-SN-428994	.....	c32	N76-16249	US-PATENT-APPL-SN-453232	.....	c15	N71-12131
US-PATENT-APPL-SN-428995	.....	c51	N75-25503	US-PATENT-APPL-SN-453232	.....	c18	N75-19329
US-PATENT-APPL-SN-429437	.....	c35	N75-23910	US-PATENT-APPL-SN-453241	.....	c33	N75-29318
US-PATENT-APPL-SN-430192	.....	c18	N71-27170	US-PATENT-APPL-SN-455163	.....	c32	N75-26195
US-PATENT-APPL-SN-430226	.....	c18	N71-23658	US-PATENT-APPL-SN-455165	.....	c36	N75-30524
US-PATENT-APPL-SN-430496	.....	c26	N75-29236	US-PATENT-APPL-SN-455352	.....	c33	N71-20834
US-PATENT-APPL-SN-430776	.....	c03	N70-41954	US-PATENT-APPL-SN-455477	.....	c08	N71-19687
US-PATENT-APPL-SN-430777	.....	c18	N71-24184	US-PATENT-APPL-SN-456578	.....	c07	N70-41678
US-PATENT-APPL-SN-430778	.....	c03	N71-10728	US-PATENT-APPL-SN-456581	.....	c09	N71-23021
US-PATENT-APPL-SN-430780	.....	c03	N71-12260	US-PATENT-APPL-SN-456874	.....	c06	N71-23499
US-PATENT-APPL-SN-431235	.....	c15	N71-16052	US-PATENT-APPL-SN-457295	.....	c20	N75-24847
US-PATENT-APPL-SN-432025	.....	c15	N71-21531	US-PATENT-APPL-SN-457874	.....	c09	N71-23545
US-PATENT-APPL-SN-432026	.....	c07	N71-23405	US-PATENT-APPL-SN-457875	.....	c31	N70-42015
US-PATENT-APPL-SN-432027	.....	c21	N70-41930	US-PATENT-APPL-SN-457876	.....	c02	N71-12243
US-PATENT-APPL-SN-432028	.....	c15	N71-22723	US-PATENT-APPL-SN-457879	.....	c15	N71-121078
US-PATENT-APPL-SN-432030	.....	c12	N71-20896	US-PATENT-APPL-SN-458484	.....	c44	N76-14595
US-PATENT-APPL-SN-432032	.....	c15	N69-24322	US-PATENT-APPL-SN-459138	.....	c14	N71-10773
US-PATENT-APPL-SN-432433	.....	c15	N71-22705	US-PATENT-APPL-SN-459407	.....	c14	N73-30391
US-PATENT-APPL-SN-433821	.....	c09	N71-16089	US-PATENT-APPL-SN-459736	.....	c33	N75-26245
US-PATENT-APPL-SN-433968	.....	c33	N74-14941	US-PATENT-APPL-SN-460876	.....	c09	N69-21470
US-PATENT-APPL-SN-433968	.....	c33	N75-25041	US-PATENT-APPL-SN-460877	.....	c33	N71-23085
US-PATENT-APPL-SN-434143	.....	c15	N71-15871	US-PATENT-APPL-SN-461073	.....	c33	N75-26246
US-PATENT-APPL-SN-434148	.....	c31	N71-24750	US-PATENT-APPL-SN-461477	.....	c37	N75-19686
US-PATENT-APPL-SN-435387	.....	c10	N70-42032	US-PATENT-APPL-SN-461765	.....	c17	N71-23046
US-PATENT-APPL-SN-435433	.....	c14	N71-30026	US-PATENT-APPL-SN-462341	.....	c44	N76-31666
US-PATENT-APPL-SN-435756	.....	c12	N71-16894	US-PATENT-APPL-SN-462424	.....	c24	N77-19171
US-PATENT-APPL-SN-436313	.....	c54	N77-32721	US-PATENT-APPL-SN-462705	.....	c37	N75-19684
US-PATENT-APPL-SN-436315	.....	c26	N75-19408	US-PATENT-APPL-SN-462762	.....	c12	N69-21466
US-PATENT-APPL-SN-436316	.....	c20	N76-14191	US-PATENT-APPL-SN-462763	.....	c14	N71-22991
US-PATENT-APPL-SN-436317	.....	c37	N76-24575	US-PATENT-APPL-SN-462844	.....	c33	N75-19520
US-PATENT-APPL-SN-437556	.....	c27	N76-16230	US-PATENT-APPL-SN-462903	.....	c37	N76-14461
US-PATENT-APPL-SN-437611	.....	c09	N71-22796	US-PATENT-APPL-SN-463925	.....	c74	N76-30053
US-PATENT-APPL-SN-438135	.....	c09	N71-23027	US-PATENT-APPL-SN-464720	.....	c32	N76-16249
US-PATENT-APPL-SN-438147	.....	c75	N76-14931	US-PATENT-APPL-SN-464721	.....	c37	N75-26372
US-PATENT-APPL-SN-438797	.....	c14	N71-10500	US-PATENT-APPL-SN-464722	.....	c35	N76-22509
US-PATENT-APPL-SN-439489	.....	c09	N70-41717	US-PATENT-APPL-SN-464723	.....	c33	N75-30429
US-PATENT-APPL-SN-439490	.....	c23	N69-24332	US-PATENT-APPL-SN-464878	.....	c10	N71-22986
US-PATENT-APPL-SN-440033	.....	c27	N70-41897	US-PATENT-APPL-SN-464879	.....	c14	N71-21072
US-PATENT-APPL-SN-440036	.....	c09	N71-23097	US-PATENT-APPL-SN-464880	.....	c33	N71-21586
US-PATENT-APPL-SN-440039	.....	c09	N71-22888	US-PATENT-APPL-SN-464885	.....	c15	N71-22997
US-PATENT-APPL-SN-440916	.....	c33	N75-27252	US-PATENT-APPL-SN-466390	.....	c28	N71-20330
US-PATENT-APPL-SN-440917	.....	c37	N76-18459	US-PATENT-APPL-SN-466868	.....	c22	N71-23599
US-PATENT-APPL-SN-441279	.....	c35	N75-29382	US-PATENT-APPL-SN-466873	.....	c17	N71-20743
US-PATENT-APPL-SN-441936	.....	c14	N69-39975	US-PATENT-APPL-SN-466875	.....	c08	N71-22707
US-PATENT-APPL-SN-442558	.....	c15	N71-10799	US-PATENT-APPL-SN-467820	.....	c28	N71-26779
US-PATENT-APPL-SN-442835	.....	c26	N71-29156	US-PATENT-APPL-SN-468614	.....	c60	N77-14751
US-PATENT-APPL-SN-444087	.....	c02	N71-11041	US-PATENT-APPL-SN-468614	.....	c60	N77-32741
US-PATENT-APPL-SN-445178	.....	c37	N76-15461	US-PATENT-APPL-SN-468647	.....	c21	N71-10771
US-PATENT-APPL-SN-445292	.....	c11	N71-23030	US-PATENT-APPL-SN-468655	.....	c15	N69-21471
US-PATENT-APPL-SN-445807	.....	c14	N71-22996	US-PATENT-APPL-SN-469011	.....	c11	N69-21540
US-PATENT-APPL-SN-446131	.....	c14	N71-22992	US-PATENT-APPL-SN-469012	.....	c25	N71-20747
US-PATENT-APPL-SN-446560	.....	c12	N76-15189	US-PATENT-APPL-SN-469013	.....	c14	N69-27423
US-PATENT-APPL-SN-446562	.....	c36	N76-14447	US-PATENT-APPL-SN-470428	.....	c33	N76-16332
US-PATENT-APPL-SN-446564	.....	c35	N75-26334	US-PATENT-APPL-SN-470429	.....	c33	N75-31329
US-PATENT-APPL-SN-446567	.....	c34	N76-27515	US-PATENT-APPL-SN-470902	.....	c06	N71-28808
US-PATENT-APPL-SN-446568	.....	c37	N76-23570	US-PATENT-APPL-SN-471154	.....	c09	N73-28084
US-PATENT-APPL-SN-446569	.....	c77	N75-20140	US-PATENT-APPL-SN-472066	.....	c31	N70-42075
US-PATENT-APPL-SN-447124	.....	c35	N75-30503	US-PATENT-APPL-SN-472372	.....	c07	N71-20791
US-PATENT-APPL-SN-447927	.....	c11	N71-10776	US-PATENT-APPL-SN-472747	.....	c31	N71-16081
US-PATENT-APPL-SN-447928	.....	c15	N71-10577	US-PATENT-APPL-SN-472775	.....	c35	N75-33369
US-PATENT-APPL-SN-447930	.....	c14	N69-39896	US-PATENT-APPL-SN-473535	.....	c31	N71-15637
US-PATENT-APPL-SN-447933	.....	c03	N69-21337	US-PATENT-APPL-SN-473537	.....	c08	N71-15908
US-PATENT-APPL-SN-448320	.....	c91	N76-30131	US-PATENT-APPL-SN-473793	.....	c02	N77-10001
US-PATENT-APPL-SN-448321	.....	c27	N74-19772	US-PATENT-APPL-SN-474531	.....	c31	N71-23009
US-PATENT-APPL-SN-448323	.....	c18	N76-17185	US-PATENT-APPL-SN-474744	.....	c35	N76-14441
US-PATENT-APPL-SN-448325	.....	c33	N75-26244	US-PATENT-APPL-SN-474745	.....	c37	N76-14463
US-PATENT-APPL-SN-448365	.....	c10	N71-26414	US-PATENT-APPL-SN-475299	.....	c31	N71-17679
US-PATENT-APPL-SN-448898	.....	c15	N70-41310	US-PATENT-APPL-SN-475336	.....	c54	N75-27558
US-PATENT-APPL-SN-449118	.....	c33	N75-19524	US-PATENT-APPL-SN-475337	.....	c51	N76-29891

NUMBER INDEX

US-PATENT-APPL-SN-475338	c35	N76-15431	US-PATENT-APPL-SN-499122	c15	N71-24164
US-PATENT-APPL-SN-476759	c03	N70-42073	US-PATENT-APPL-SN-500435	c14	N71-21082
US-PATENT-APPL-SN-476761	c11	N71-10748	US-PATENT-APPL-SN-500446	c10	N71-23029
US-PATENT-APPL-SN-476763	c09	N69-21313	US-PATENT-APPL-SN-500979	c32	N76-18295
US-PATENT-APPL-SN-477333	c28	N70-41922	US-PATENT-APPL-SN-500980	c72	N76-15860
US-PATENT-APPL-SN-478451	c14	N69-21363	US-PATENT-APPL-SN-500981	c35	N77-10492
US-PATENT-APPL-SN-478800	c37	N76-19436	US-PATENT-APPL-SN-500982	c75	N76-17951
US-PATENT-APPL-SN-478802	c06	N74-27872	US-PATENT-APPL-SN-501011	c33	N76-18345
US-PATENT-APPL-SN-478802	c35	N75-29381	US-PATENT-APPL-SN-501012	c33	N76-14373
US-PATENT-APPL-SN-478803	c31	N76-14284	US-PATENT-APPL-SN-502124	c35	N76-16393
US-PATENT-APPL-SN-479353	c15	N71-23256	US-PATENT-APPL-SN-502135	c35	N76-15433
US-PATENT-APPL-SN-479357	c36	N77-19416	US-PATENT-APPL-SN-502136	c35	N75-27331
US-PATENT-APPL-SN-480210	c11	N71-21474	US-PATENT-APPL-SN-502137	c37	N76-21554
US-PATENT-APPL-SN-480211	c14	N71-26135	US-PATENT-APPL-SN-502138	c43	N77-10580
US-PATENT-APPL-SN-482104	c27	N76-22377	US-PATENT-APPL-SN-502693	c15	N71-20739
US-PATENT-APPL-SN-482105	c27	N76-23426	US-PATENT-APPL-SN-502701	c08	N71-23295
US-PATENT-APPL-SN-482307	c15	N71-21060	US-PATENT-APPL-SN-502709	c31	N71-21881
US-PATENT-APPL-SN-482311	c05	N71-22748	US-PATENT-APPL-SN-502710	c15	N71-23048
US-PATENT-APPL-SN-482313	c11	N69-24321	US-PATENT-APPL-SN-502729	c31	N70-18711
US-PATENT-APPL-SN-482670	c14	N71-21007	US-PATENT-APPL-SN-502739	c09	N71-23311
US-PATENT-APPL-SN-482952	c09	N71-28926	US-PATENT-APPL-SN-502740	c14	N69-27485
US-PATENT-APPL-SN-482953	c74	N76-18913	US-PATENT-APPL-SN-502743	c08	N71-19435
US-PATENT-APPL-SN-482967	c34	N76-18364	US-PATENT-APPL-SN-502746	c03	N69-39898
US-PATENT-APPL-SN-483301	c36	N77-26477	US-PATENT-APPL-SN-502750	c09	N71-19466
US-PATENT-APPL-SN-483350	c37	N76-14460	US-PATENT-APPL-SN-502753	c07	N69-39978
US-PATENT-APPL-SN-483851	c35	N76-15435	US-PATENT-APPL-SN-502756	c03	N71-23336
US-PATENT-APPL-SN-483852	c33	N75-30430	US-PATENT-APPL-SN-504225	c35	N76-16392
US-PATENT-APPL-SN-483857	c44	N76-14601	US-PATENT-APPL-SN-504266	c31	N71-21064
US-PATENT-APPL-SN-483858	c35	N76-18400	US-PATENT-APPL-SN-505320	c16	N71-18614
US-PATENT-APPL-SN-483885	c04	N71-23185	US-PATENT-APPL-SN-505321	c10	N71-22962
US-PATENT-APPL-SN-483886	c09	N71-22988	US-PATENT-APPL-SN-505765	c15	N71-23816
US-PATENT-APPL-SN-483891	c14	N69-39982	US-PATENT-APPL-SN-505819	c33	N76-16331
US-PATENT-APPL-SN-484156	c11	N71-21475	US-PATENT-APPL-SN-505881	c09	N76-24280
US-PATENT-APPL-SN-484208	c35	N75-30502	US-PATENT-APPL-SN-506135	c06	N71-20905
US-PATENT-APPL-SN-484209	c35	N76-18403	US-PATENT-APPL-SN-506137	c15	N71-23049
US-PATENT-APPL-SN-484485	c01	N71-23497	US-PATENT-APPL-SN-506804	c35	N76-18402
US-PATENT-APPL-SN-484489	c10	N71-15909	US-PATENT-APPL-SN-506908	c09	N71-18843
US-PATENT-APPL-SN-484490	c24	N71-20518	US-PATENT-APPL-SN-507254	c14	N71-22990
US-PATENT-APPL-SN-484855	c09	N71-19480	US-PATENT-APPL-SN-507257	c09	N71-19449
US-PATENT-APPL-SN-485058	c06	N71-23500	US-PATENT-APPL-SN-508169	c18	N71-27397
US-PATENT-APPL-SN-485656	c28	N71-10574	US-PATENT-APPL-SN-508170	c08	N71-22710
US-PATENT-APPL-SN-485957	c25	N71-21694	US-PATENT-APPL-SN-508601	c15	N71-22878
US-PATENT-APPL-SN-485958	c15	N71-24047	US-PATENT-APPL-SN-508784	c76	N76-25049
US-PATENT-APPL-SN-485960	c15	N70-42017	US-PATENT-APPL-SN-508873	c14	N71-23240
US-PATENT-APPL-SN-486573	c10	N71-19469	US-PATENT-APPL-SN-509460	c01	N71-13411
US-PATENT-APPL-SN-486884	c15	N73-32362	US-PATENT-APPL-SN-510150	c10	N71-26103
US-PATENT-APPL-SN-487156	c44	N77-10636	US-PATENT-APPL-SN-510155	c06	N71-11235
US-PATENT-APPL-SN-487341	c14	N71-19431	US-PATENT-APPL-SN-510474	c15	N71-23480
US-PATENT-APPL-SN-487342	c09	N71-21583	US-PATENT-APPL-SN-510475	c14	N71-23087
US-PATENT-APPL-SN-487343	c03	N69-39890	US-PATENT-APPL-SN-510677	c44	N77-19571
US-PATENT-APPL-SN-487344	c15	N69-21472	US-PATENT-APPL-SN-511299	c15	N71-22798
US-PATENT-APPL-SN-487352	c14	N71-18699	US-PATENT-APPL-SN-511334	c36	N77-32478
US-PATENT-APPL-SN-487652	c23	N76-15268	US-PATENT-APPL-SN-511346	c15	N77-10113
US-PATENT-APPL-SN-487929	c33	N74-20859	US-PATENT-APPL-SN-511564	c09	N69-39885
US-PATENT-APPL-SN-487934	c15	N71-21530	US-PATENT-APPL-SN-511567	c05	N71-12336
US-PATENT-APPL-SN-487939	c14	N71-23040	US-PATENT-APPL-SN-511887	c35	N76-15436
US-PATENT-APPL-SN-487940	c10	N71-26434	US-PATENT-APPL-SN-511894	c03	N76-32140
US-PATENT-APPL-SN-488381	c14	N73-32321	US-PATENT-APPL-SN-512352	c15	N70-33330
US-PATENT-APPL-SN-488616	c07	N76-18117	US-PATENT-APPL-SN-512509	c26	N75-27125
US-PATENT-APPL-SN-488745	c26	N75-27127	US-PATENT-APPL-SN-512559	c23	N71-22881
US-PATENT-APPL-SN-489008	c23	N75-30256	US-PATENT-APPL-SN-512561	c16	N71-25914
US-PATENT-APPL-SN-489009	c33	N76-19339	US-PATENT-APPL-SN-512562	c16	N71-24074
US-PATENT-APPL-SN-489442	c25	N69-39884	US-PATENT-APPL-SN-512825	c32	N76-15329
US-PATENT-APPL-SN-491054	c14	N71-23174	US-PATENT-APPL-SN-513389	c25	N75-12087
US-PATENT-APPL-SN-491058	c09	N71-23443	US-PATENT-APPL-SN-513576	c35	N76-29552
US-PATENT-APPL-SN-491059	c09	N71-23015	US-PATENT-APPL-SN-513611	c24	N76-22309
US-PATENT-APPL-SN-491413	c74	N74-30118	US-PATENT-APPL-SN-513612	c05	N77-17029
US-PATENT-APPL-SN-491416	c35	N75-33368	US-PATENT-APPL-SN-513613	c27	N74-34579
US-PATENT-APPL-SN-491417	c37	N76-19437	US-PATENT-APPL-SN-513689	c34	N76-34881
US-PATENT-APPL-SN-491418	c31	N76-31365	US-PATENT-APPL-SN-513690	c37	N76-20480
US-PATENT-APPL-SN-491419	c32	N76-15330	US-PATENT-APPL-SN-514407	c18	N71-22894
US-PATENT-APPL-SN-491845	c28	N71-15659	US-PATENT-APPL-SN-514546	c74	N76-20958
US-PATENT-APPL-SN-492344	c05	N71-22896	US-PATENT-APPL-SN-515484	c14	N71-22993
US-PATENT-APPL-SN-493359	c20	N76-21275	US-PATENT-APPL-SN-516150	c05	N71-19440
US-PATENT-APPL-SN-493360	c32	N74-32601	US-PATENT-APPL-SN-516151	c15	N70-41679
US-PATENT-APPL-SN-493363	c33	N76-21390	US-PATENT-APPL-SN-516152	c14	N71-23225
US-PATENT-APPL-SN-493942	c14	N71-17659	US-PATENT-APPL-SN-516153	c10	N71-28783
US-PATENT-APPL-SN-493943	c15	N71-21529	US-PATENT-APPL-SN-516154	c09	N69-24330
US-PATENT-APPL-SN-494280	c28	N71-23081	US-PATENT-APPL-SN-516155	c09	N71-23270
US-PATENT-APPL-SN-494282	c15	N69-39735	US-PATENT-APPL-SN-516158	c09	N71-19479
US-PATENT-APPL-SN-494283	c31	N71-24035	US-PATENT-APPL-SN-516159	c14	N70-41812
US-PATENT-APPL-SN-494287	c03	N71-22974	US-PATENT-APPL-SN-516160	c33	N71-16277
US-PATENT-APPL-SN-494739	c07	N71-26291	US-PATENT-APPL-SN-516162	c07	N71-28900
US-PATENT-APPL-SN-495021	c44	N74-30448	US-PATENT-APPL-SN-516793	c16	N71-22895
US-PATENT-APPL-SN-495022	c60	N77-12721	US-PATENT-APPL-SN-516794	c14	N70-42074
US-PATENT-APPL-SN-496205	c14	N71-22965	US-PATENT-APPL-SN-517100	c28	N70-33241
US-PATENT-APPL-SN-496779	c05	N76-29217	US-PATENT-APPL-SN-517156	c14	N71-23093
US-PATENT-APPL-SN-498167	c03	N71-10608	US-PATENT-APPL-SN-517157	c15	N71-22722
US-PATENT-APPL-SN-498168	c28	N71-21822	US-PATENT-APPL-SN-517158	c14	N71-23401

NUMBER INDEX

US-PATENT-APPL-SN-517159	.....	c15	N71-20740	US-PATENT-APPL-SN-536786	.....	c44	N77-32581
US-PATENT-APPL-SN-517858	.....	c14	N71-21006	US-PATENT-APPL-SN-537024	.....	c44	N76-27664
US-PATENT-APPL-SN-517869	.....	c15	N71-23050	US-PATENT-APPL-SN-537473	.....	c36	N75-15973
US-PATENT-APPL-SN-517955	.....	c39	N76-31562	US-PATENT-APPL-SN-537480	.....	c45	N76-31714
US-PATENT-APPL-SN-518487	.....	c05	N71-11190	US-PATENT-APPL-SN-537615	.....	c28	N71-22983
US-PATENT-APPL-SN-518544	.....	c44	N76-24696	US-PATENT-APPL-SN-537617	.....	c09	N71-22987
US-PATENT-APPL-SN-518545	.....	c19	N76-22284	US-PATENT-APPL-SN-537979	.....	c37	N77-11397
US-PATENT-APPL-SN-518546	.....	c26	N76-18257	US-PATENT-APPL-SN-538047	.....	c37	N76-27568
US-PATENT-APPL-SN-518684	.....	c44	N76-22657	US-PATENT-APPL-SN-538166	.....	c15	N71-21177
US-PATENT-APPL-SN-518685	.....	c35	N76-14429	US-PATENT-APPL-SN-538168	.....	c23	N71-16098
US-PATENT-APPL-SN-519160	.....	c18	N71-20742	US-PATENT-APPL-SN-538905	.....	c08	N71-18594
US-PATENT-APPL-SN-519161	.....	c05	N71-20718	US-PATENT-APPL-SN-538907	.....	c33	N71-18903
US-PATENT-APPL-SN-519355	.....	c09	N69-24317	US-PATENT-APPL-SN-538908	.....	c33	N71-22890
US-PATENT-APPL-SN-520838	.....	c08	N71-18595	US-PATENT-APPL-SN-538911	.....	c33	N71-22792
US-PATENT-APPL-SN-520839	.....	c10	N71-19472	US-PATENT-APPL-SN-538913	.....	c14	N71-17627
US-PATENT-APPL-SN-521006	.....	c34	N77-10463	US-PATENT-APPL-SN-538982	.....	c33	N77-14333
US-PATENT-APPL-SN-521007	.....	c25	N75-13054	US-PATENT-APPL-SN-538983	.....	c33	N76-18353
US-PATENT-APPL-SN-521601	.....	c60	N76-14818	US-PATENT-APPL-SN-539237	.....	c33	N71-16278
US-PATENT-APPL-SN-521602	.....	c37	N76-18454	US-PATENT-APPL-SN-539255	.....	c18	N71-26153
US-PATENT-APPL-SN-521603	.....	c35	N75-29380	US-PATENT-APPL-SN-539255	.....	c17	N72-28536
US-PATENT-APPL-SN-521619	.....	c51	N75-13506	US-PATENT-APPL-SN-540414	.....	c15	N71-22799
US-PATENT-APPL-SN-521620	.....	c09	N77-10071	US-PATENT-APPL-SN-540779	.....	c24	N75-16635
US-PATENT-APPL-SN-521753	.....	c15	N70-41960	US-PATENT-APPL-SN-541399	.....	c14	N71-20428
US-PATENT-APPL-SN-521755	.....	c07	N71-22984	US-PATENT-APPL-SN-542157	.....	c20	N76-21276
US-PATENT-APPL-SN-521754	.....	c28	N71-28849	US-PATENT-APPL-SN-542192	.....	c26	N75-27126
US-PATENT-APPL-SN-521816	.....	c35	N77-19385	US-PATENT-APPL-SN-542713	.....	c23	N71-23976
US-PATENT-APPL-SN-521817	.....	c45	N76-21742	US-PATENT-APPL-SN-542754	.....	c34	N76-18374
US-PATENT-APPL-SN-521994	.....	c17	N71-23365	US-PATENT-APPL-SN-543206	.....	c05	N71-23159
US-PATENT-APPL-SN-521996	.....	c15	N69-27871	US-PATENT-APPL-SN-543774	.....	c06	N69-39733
US-PATENT-APPL-SN-521998	.....	c07	N69-24323	US-PATENT-APPL-SN-544611	.....	c33	N76-15373
US-PATENT-APPL-SN-521999	.....	c12	N71-20815	US-PATENT-APPL-SN-544895	.....	c07	N71-28809
US-PATENT-APPL-SN-522551	.....	c76	N76-20994	US-PATENT-APPL-SN-544899	.....	c09	N71-20569
US-PATENT-APPL-SN-522552	.....	c35	N76-16390	US-PATENT-APPL-SN-545223	.....	c03	N71-11056
US-PATENT-APPL-SN-522556	.....	c35	N76-15432	US-PATENT-APPL-SN-545224	.....	c15	N69-21362
US-PATENT-APPL-SN-522794	.....	c09	N71-23190	US-PATENT-APPL-SN-545228	.....	c07	N69-39736
US-PATENT-APPL-SN-522755	.....	c20	N71-16281	US-PATENT-APPL-SN-545229	.....	c03	N69-21469
US-PATENT-APPL-SN-522971	.....	c54	N76-24900	US-PATENT-APPL-SN-545282	.....	c35	N76-24524
US-PATENT-APPL-SN-523511	.....	c28	N71-20942	US-PATENT-APPL-SN-545283	.....	c32	N77-12239
US-PATENT-APPL-SN-524746	.....	c14	N73-28491	US-PATENT-APPL-SN-545284	.....	c34	N76-27517
US-PATENT-APPL-SN-526438	.....	c25	N76-22323	US-PATENT-APPL-SN-545535	.....	c03	N69-21539
US-PATENT-APPL-SN-526448	.....	c44	N76-14602	US-PATENT-APPL-SN-545805	.....	c15	N71-21744
US-PATENT-APPL-SN-526449	.....	c54	N76-14804	US-PATENT-APPL-SN-546142	.....	c09	N69-24329
US-PATENT-APPL-SN-526450	.....	c35	N77-14409	US-PATENT-APPL-SN-546148	.....	c11	N71-22875
US-PATENT-APPL-SN-526631	.....	c10	N71-19471	US-PATENT-APPL-SN-546149	.....	c16	N71-24170
US-PATENT-APPL-SN-526664	.....	c07	N69-24334	US-PATENT-APPL-SN-547072	.....	c15	N71-24043
US-PATENT-APPL-SN-526665	.....	c14	N69-24331	US-PATENT-APPL-SN-547677	.....	c10	N71-20448
US-PATENT-APPL-SN-527331	.....	c17	N73-28573	US-PATENT-APPL-SN-548468	.....	c37	N76-27567
US-PATENT-APPL-SN-527727	.....	c02	N76-16014	US-PATENT-APPL-SN-548559	.....	c44	N76-29700
US-PATENT-APPL-SN-527728	.....	c37	N76-18458	US-PATENT-APPL-SN-548808	.....	c14	N71-23227
US-PATENT-APPL-SN-527790	.....	c33	N76-14372	US-PATENT-APPL-SN-549418	.....	c36	N76-31512
US-PATENT-APPL-SN-528031	.....	c10	N69-39888	US-PATENT-APPL-SN-54986C	.....	c03	N71-19438
US-PATENT-APPL-SN-529593	.....	c27	N71-21819	US-PATENT-APPL-SN-550088	.....	c07	N71-24612
US-PATENT-APPL-SN-529594	.....	c15	N69-27483	US-PATENT-APPL-SN-551182	.....	c03	N71-23187
US-PATENT-APPL-SN-529594	.....	c33	N71-29152	US-PATENT-APPL-SN-551184	.....	c37	N76-22541
US-PATENT-APPL-SN-529609	.....	c09	N69-39986	US-PATENT-APPL-SN-551694	.....	c31	N71-18611
US-PATENT-APPL-SN-530958	.....	c09	N71-22985	US-PATENT-APPL-SN-551815	.....	c02	N71-11038
US-PATENT-APPL-SN-531565	.....	c36	N76-24553	US-PATENT-APPL-SN-551846	.....	c03	N71-20492
US-PATENT-APPL-SN-531568	.....	c24	N75-14839	US-PATENT-APPL-SN-551933	.....	c33	N71-14032
US-PATENT-APPL-SN-531572	.....	c66	N76-19888	US-PATENT-APPL-SN-551961	.....	c15	N70-33376
US-PATENT-APPL-SN-531575	.....	c32	N76-31372	US-PATENT-APPL-SN-552344	.....	c09	N69-27463
US-PATENT-APPL-SN-531642	.....	c25	N71-21693	US-PATENT-APPL-SN-552454	.....	c35	N76-24525
US-PATENT-APPL-SN-531647	.....	c04	N76-20114	US-PATENT-APPL-SN-553209	.....	c35	N75-19628
US-PATENT-APPL-SN-531647	.....	c04	N77-19056	US-PATENT-APPL-SN-553210	.....	c35	N75-19627
US-PATENT-APPL-SN-531649	.....	c37	N75-13268	US-PATENT-APPL-SN-553687	.....	c44	N76-29704
US-PATENT-APPL-SN-532006	.....	c23	N71-24857	US-PATENT-APPL-SN-553891	.....	c23	N71-16341
US-PATENT-APPL-SN-532784	.....	c27	N75-29263	US-PATENT-APPL-SN-554277	.....	c07	N71-26579
US-PATENT-APPL-SN-533555	.....	c36	N76-18428	US-PATENT-APPL-SN-554897	.....	c15	N71-22982
US-PATENT-APPL-SN-533556	.....	c36	N76-29575	US-PATENT-APPL-SN-554899	.....	c15	N70-33382
US-PATENT-APPL-SN-533608	.....	c32	N76-21366	US-PATENT-APPL-SN-554949	.....	c06	N71-20717
US-PATENT-APPL-SN-533650	.....	c35	N75-27329	US-PATENT-APPL-SN-554950	.....	c17	N71-23248
US-PATENT-APPL-SN-533659	.....	c14	N73-30390	US-PATENT-APPL-SN-555189	.....	c08	N71-27255
US-PATENT-APPL-SN-533734	.....	c33	N77-10428	US-PATENT-APPL-SN-555336	.....	c33	N76-27473
US-PATENT-APPL-SN-534265	.....	c32	N76-21365	US-PATENT-APPL-SN-555641	.....	c51	N76-29891
US-PATENT-APPL-SN-534266	.....	c35	N76-24523	US-PATENT-APPL-SN-555750	.....	c39	N75-21671
US-PATENT-APPL-SN-534295	.....	c15	N71-21076	US-PATENT-APPL-SN-556784	.....	c09	N71-20447
US-PATENT-APPL-SN-534564	.....	c10	N71-22961	US-PATENT-APPL-SN-556830	.....	c15	N71-26294
US-PATENT-APPL-SN-534901	.....	c14	N70-36807	US-PATENT-APPL-SN-557016	.....	c15	N71-23086
US-PATENT-APPL-SN-534966	.....	c15	N71-24042	US-PATENT-APPL-SN-557430	.....	c52	N77-14737
US-PATENT-APPL-SN-534975	.....	c14	N71-24232	US-PATENT-APPL-SN-557444	.....	c33	N76-31410
US-PATENT-APPL-SN-535304	.....	c09	N71-28810	US-PATENT-APPL-SN-557448	.....	c45	N76-17656
US-PATENT-APPL-SN-535410	.....	c37	N76-15457	US-PATENT-APPL-SN-557565	.....	c24	N77-27187
US-PATENT-APPL-SN-536210	.....	c17	N71-24830	US-PATENT-APPL-SN-557584	.....	c09	N71-20851
US-PATENT-APPL-SN-536216	.....	c10	N71-23315	US-PATENT-APPL-SN-557861	.....	c03	N71-24605
US-PATENT-APPL-SN-536217	.....	c10	N71-23544	US-PATENT-APPL-SN-557868	.....	c14	N70-41682
US-PATENT-APPL-SN-536535	.....	c33	N76-14371	US-PATENT-APPL-SN-557871	.....	c10	N71-21483
US-PATENT-APPL-SN-536761	.....	c33	N76-19338	US-PATENT-APPL-SN-558600	.....	c74	N77-10899
US-PATENT-APPL-SN-536762	.....	c37	N76-22540	US-PATENT-APPL-SN-559055	.....	c33	N71-29046
US-PATENT-APPL-SN-536765	.....	c33	N76-31409	US-PATENT-APPL-SN-559349	.....	c33	N71-24145
				US-PATENT-APPL-SN-559350	.....	c33	N71-28892

NUMBER INDEX

US-PATENT-APPL-SN-559351	c14	N69-39785	US-PATENT-APPL-SN-577546	c31	N71-23008
US-PATENT-APPL-SN-559845	c35	N76-29551	US-PATENT-APPL-SN-577548	c09	N69-27422
US-PATENT-APPL-SN-559846	c34	N75-19580	US-PATENT-APPL-SN-577548	c14	N72-28438
US-PATENT-APPL-SN-559847	c34	N75-19579	US-PATENT-APPL-SN-577549	c15	N71-22721
US-PATENT-APPL-SN-560891	c73	N75-22108	US-PATENT-APPL-SN-577775	c14	N71-17574
US-PATENT-APPL-SN-560967	c15	N69-21922	US-PATENT-APPL-SN-577778	c03	N71-11050
US-PATENT-APPL-SN-560968	c10	N71-24863	US-PATENT-APPL-SN-578240	c34	N77-18382
US-PATENT-APPL-SN-560969	c14	N71-15622	US-PATENT-APPL-SN-578241	c52	N76-29896
US-PATENT-APPL-SN-561020	c44	N76-23675	US-PATENT-APPL-SN-578700	c35	N76-19408
US-PATENT-APPL-SN-561223	c14	N71-20427	US-PATENT-APPL-SN-578916	c14	N71-23036
US-PATENT-APPL-SN-561764	c32	N77-10392	US-PATENT-APPL-SN-578923	c15	N71-21403
US-PATENT-APPL-SN-561956	c35	N77-17426	US-PATENT-APPL-SN-578925	c23	N71-16355
US-PATENT-APPL-SN-562443	c09	N69-39734	US-PATENT-APPL-SN-578926	c06	N69-39936
US-PATENT-APPL-SN-562444	c14	N71-22995	US-PATENT-APPL-SN-578928	c26	N71-21824
US-PATENT-APPL-SN-562445	c14	N71-23797	US-PATENT-APPL-SN-578931	c23	N71-21882
US-PATENT-APPL-SN-562499	c32	N77-31350	US-PATENT-APPL-SN-578932	c08	N71-12505
US-PATENT-APPL-SN-562933	c10	N71-24799	US-PATENT-APPL-SN-579121	c15	N71-29136
US-PATENT-APPL-SN-562934	c09	N69-21468	US-PATENT-APPL-SN-579375	c07	N77-14025
US-PATENT-APPL-SN-562992	c23	N75-29181	US-PATENT-APPL-SN-579989	c34	N77-32413
US-PATENT-APPL-SN-563049	c17	N76-29347	US-PATENT-APPL-SN-580365	c15	N71-23255
US-PATENT-APPL-SN-563050	c37	N76-31524	US-PATENT-APPL-SN-581514	c70	N75-26789
US-PATENT-APPL-SN-563283	c35	N76-18401	US-PATENT-APPL-SN-582171	c32	N71-16428
US-PATENT-APPL-SN-563644	c15	N71-18613	US-PATENT-APPL-SN-582213	c32	N74-22096
US-PATENT-APPL-SN-563646	c05	N71-23096	US-PATENT-APPL-SN-582318	c33	N76-27472
US-PATENT-APPL-SN-563648	c15	N71-17803	US-PATENT-APPL-SN-582609	c10	N71-19467
US-PATENT-APPL-SN-563650	c25	N69-21929	US-PATENT-APPL-SN-583485	c33	N77-28385
US-PATENT-APPL-SN-563651	c28	N71-23293	US-PATENT-APPL-SN-583486	c33	N77-26386
US-PATENT-APPL-SN-564622	c37	N77-31497	US-PATENT-APPL-SN-583487	c52	N76-19785
US-PATENT-APPL-SN-564919	c09	N71-23316	US-PATENT-APPL-SN-584015	c14	N71-26475
US-PATENT-APPL-SN-565162	c35	N75-21600	US-PATENT-APPL-SN-584066	c10	N71-20852
US-PATENT-APPL-SN-565289	c38	N77-17495	US-PATENT-APPL-SN-584067	c07	N71-12392
US-PATENT-APPL-SN-565290	c17	N76-22245	US-PATENT-APPL-SN-584070	c09	N69-27500
US-PATENT-APPL-SN-566392	c14	N71-23175	US-PATENT-APPL-SN-584071	c26	N71-16037
US-PATENT-APPL-SN-566397	c05	N71-23161	US-PATENT-APPL-SN-584072	c15	N69-39786
US-PATENT-APPL-SN-566493	c44	N76-29701	US-PATENT-APPL-SN-584094	c26	N77-20201
US-PATENT-APPL-SN-566494	c32	N77-30309	US-PATENT-APPL-SN-585420	c35	N76-31489
US-PATENT-APPL-SN-566495	c33	N77-17351	US-PATENT-APPL-SN-585988	c33	N75-29318
US-PATENT-APPL-SN-566717	c14	N71-24233	US-PATENT-APPL-SN-586324	c05	N71-26293
US-PATENT-APPL-SN-567686	c15	N71-22994	US-PATENT-APPL-SN-586325	c31	N71-24315
US-PATENT-APPL-SN-567806	c06	N71-22975	US-PATENT-APPL-SN-586329	c05	N71-26623
US-PATENT-APPL-SN-568067	c31	N71-22968	US-PATENT-APPL-SN-586330	c05	N71-12344
US-PATENT-APPL-SN-568071	c14	N69-27461	US-PATENT-APPL-SN-586635	c21	N71-15642
US-PATENT-APPL-SN-568160	c10	N71-18724	US-PATENT-APPL-SN-588651	c31	N71-24813
US-PATENT-APPL-SN-568346	c04	N69-27487	US-PATENT-APPL-SN-588671	c03	N71-23354
US-PATENT-APPL-SN-568352	c09	N71-20842	US-PATENT-APPL-SN-589119	c32	N77-32342
US-PATENT-APPL-SN-568354	c14	N71-22752	US-PATENT-APPL-SN-589173	c32	N77-12240
US-PATENT-APPL-SN-568355	c32	N71-23971	US-PATENT-APPL-SN-589233	c33	N77-14335
US-PATENT-APPL-SN-568356	c14	N71-15599	US-PATENT-APPL-SN-590141	c03	N69-24267
US-PATENT-APPL-SN-568362	c03	N69-39983	US-PATENT-APPL-SN-590144	c15	N71-15606
US-PATENT-APPL-SN-568364	c10	N71-26418	US-PATENT-APPL-SN-590145	c07	N69-39980
US-PATENT-APPL-SN-568541	c24	N77-28225	US-PATENT-APPL-SN-590146	c09	N69-21926
US-PATENT-APPL-SN-568620	c10	N71-26626	US-PATENT-APPL-SN-590147	c15	N71-21489
US-PATENT-APPL-SN-568987	c10	N71-19547	US-PATENT-APPL-SN-590158	c05	N71-24147
US-PATENT-APPL-SN-569925	c07	N77-17059	US-PATENT-APPL-SN-590159	c09	N69-24324
US-PATENT-APPL-SN-570093	c06	N71-17705	US-PATENT-APPL-SN-590182	c37	N76-29588
US-PATENT-APPL-SN-570095	c14	N71-23226	US-PATENT-APPL-SN-591000	c15	N71-24044
US-PATENT-APPL-SN-570097	c15	N69-23185	US-PATENT-APPL-SN-591004	c07	N71-11266
US-PATENT-APPL-SN-570678	c17	N71-25903	US-PATENT-APPL-SN-591007	c16	N69-27491
US-PATENT-APPL-SN-5711458	c44	N77-10635	US-PATENT-APPL-SN-591014	c28	N71-24736
US-PATENT-APPL-SN-5711459	c54	N75-25594	US-PATENT-APPL-SN-591568	c74	N76-31998
US-PATENT-APPL-SN-571816	c39	N75-31479	US-PATENT-APPL-SN-591569	c37	N77-12402
US-PATENT-APPL-SN-571821	c20	N76-22296	US-PATENT-APPL-SN-591930	c03	N69-21330
US-PATENT-APPL-SN-572990	c37	N75-22748	US-PATENT-APPL-SN-592159	c07	N76-27232
US-PATENT-APPL-SN-572991	c51	N77-22794	US-PATENT-APPL-SN-592680	c15	N71-22877
US-PATENT-APPL-SN-573432	c14	N71-23790	US-PATENT-APPL-SN-592694	c05	N71-12342
US-PATENT-APPL-SN-574208	c37	N76-29590	US-PATENT-APPL-SN-593142	c37	N77-17464
US-PATENT-APPL-SN-574218	c52	N76-29895	US-PATENT-APPL-SN-593593	c06	N71-11239
US-PATENT-APPL-SN-574219	c35	N76-31490	US-PATENT-APPL-SN-593594	c06	N71-11236
US-PATENT-APPL-SN-574280	c15	N69-21460	US-PATENT-APPL-SN-593595	c06	N71-24740
US-PATENT-APPL-SN-574282	c15	N69-23190	US-PATENT-APPL-SN-593604	c11	N69-27466
US-PATENT-APPL-SN-574282	c15	N71-23025	US-PATENT-APPL-SN-593605	c06	N71-11242
US-PATENT-APPL-SN-574283	c14	N69-24257	US-PATENT-APPL-SN-593606	c06	N71-11243
US-PATENT-APPL-SN-574284	c08	N71-19763	US-PATENT-APPL-SN-593607	c07	N71-26102
US-PATENT-APPL-SN-574290	c14	N71-20439	US-PATENT-APPL-SN-594584	c14	N71-25892
US-PATENT-APPL-SN-575291	c33	N71-29151	US-PATENT-APPL-SN-594587	c28	N71-21493
US-PATENT-APPL-SN-575475	c05	N69-23192	US-PATENT-APPL-SN-594633	c15	N71-24046
US-PATENT-APPL-SN-575930	c06	N71-23230	US-PATENT-APPL-SN-594971	c33	N75-27261
US-PATENT-APPL-SN-576182	c33	N71-24276	US-PATENT-APPL-SN-595197	c33	N77-10429
US-PATENT-APPL-SN-576183	c09	N71-23525	US-PATENT-APPL-SN-595254	c32	N75-30385
US-PATENT-APPL-SN-576195	c14	N71-21079	US-PATENT-APPL-SN-595745	c37	N77-32501
US-PATENT-APPL-SN-576488	c44	N76-28635	US-PATENT-APPL-SN-595747	c37	N77-32500
US-PATENT-APPL-SN-576521	c09	N71-20864	US-PATENT-APPL-SN-596338	c09	N71-20816
US-PATENT-APPL-SN-576767	c35	N75-25134	US-PATENT-APPL-SN-596641	c07	N77-32106
US-PATENT-APPL-SN-576774	c60	N77-19760	US-PATENT-APPL-SN-596733	c15	N72-11389
US-PATENT-APPL-SN-576792	c14	N71-26136	US-PATENT-APPL-SN-596735	c32	N71-24285
US-PATENT-APPL-SN-576797	c09	N69-24318	US-PATENT-APPL-SN-596787	c37	N77-19458
US-PATENT-APPL-SN-577114	c15	N69-24320	US-PATENT-APPL-SN-596788	c33	N76-21390
US-PATENT-APPL-SN-577115	c15	N71-17647	US-PATENT-APPL-SN-596905	c24	N77-19170
US-PATENT-APPL-SN-577545	c08	N71-18693	US-PATENT-APPL-SN-598118	c15	N69-27490

NUMBER INDEX

US-PATENT-APPL-SN-598119	c08 N71-19437	US-PATENT-APPL-SN-619907	c09 N69-21543
US-PATENT-APPL-SN-598120	c08 N71-18602	US-PATENT-APPL-SN-619908	c08 N71-20571
US-PATENT-APPL-SN-598504	c37 N77-14477	US-PATENT-APPL-SN-619986	c37 N75-32465
US-PATENT-APPL-SN-598967	c31 N77-10229	US-PATENT-APPL-SN-620675	c54 N75-32766
US-PATENT-APPL-SN-598968	c33 N77-17354	US-PATENT-APPL-SN-621098	c09 N71-20446
US-PATENT-APPL-SN-598969	c44 N75-28519	US-PATENT-APPL-SN-621714	c15 N71-19569
US-PATENT-APPL-SN-599284	c35 N77-14411	US-PATENT-APPL-SN-621715	c05 N71-11207
US-PATENT-APPL-SN-599975	c08 N69-21928	US-PATENT-APPL-SN-621742	c28 N71-23968
US-PATENT-APPL-SN-600266	c14 N71-20430	US-PATENT-APPL-SN-623156	c04 N77-19056
US-PATENT-APPL-SN-600682	c14 N71-20461	US-PATENT-APPL-SN-623187	c34 N77-19353
US-PATENT-APPL-SN-601228	c15 N71-17652	US-PATENT-APPL-SN-623188	c54 N77-21844
US-PATENT-APPL-SN-601229	c14 N71-26474	US-PATENT-APPL-SN-623238	c51 N77-25769
US-PATENT-APPL-SN-602617	c37 N77-23483	US-PATENT-APPL-SN-623536	c09 N76-10148
US-PATENT-APPL-SN-602618	c44 N76-31667	US-PATENT-APPL-SN-625732	c35 N77-18417
US-PATENT-APPL-SN-602828	c09 N71-13531	US-PATENT-APPL-SN-625733	c26 N77-28265
US-PATENT-APPL-SN-603396	c14 N69-23191	US-PATENT-APPL-SN-625734	c37 N76-13496
US-PATENT-APPL-SN-603397	c26 N71-23292	US-PATENT-APPL-SN-625759	c37 N77-14478
US-PATENT-APPL-SN-604374	c44 N76-29699	US-PATENT-APPL-SN-625781	c33 N77-31404
US-PATENT-APPL-SN-605090	c15 N71-19485	US-PATENT-APPL-SN-626376	c05 N71-11189
US-PATENT-APPL-SN-605091	c15 N71-26346	US-PATENT-APPL-SN-626942	c51 N77-27677
US-PATENT-APPL-SN-605092	c05 N71-23317	US-PATENT-APPL-SN-627257	c08 N71-12504
US-PATENT-APPL-SN-605093	c17 N71-24911	US-PATENT-APPL-SN-627599	c18 N71-16046
US-PATENT-APPL-SN-605094	c09 N71-24808	US-PATENT-APPL-SN-628094	c16 N71-20400
US-PATENT-APPL-SN-605095	c10 N71-19417	US-PATENT-APPL-SN-628246	c15 N71-17687
US-PATENT-APPL-SN-605096	c15 N71-24834	US-PATENT-APPL-SN-628247	c09 N69-21542
US-PATENT-APPL-SN-605097	c14 N69-21923	US-PATENT-APPL-SN-628248	c14 N69-27432
US-PATENT-APPL-SN-605098	c09 N71-26092	US-PATENT-APPL-SN-629456	c37 N77-14479
US-PATENT-APPL-SN-605099	c09 N71-23548	US-PATENT-APPL-SN-629457	c35 N77-32454
US-PATENT-APPL-SN-605100	c15 N71-21536	US-PATENT-APPL-SN-629458	c74 N76-13909
US-PATENT-APPL-SN-605102	c09 N69-39987	US-PATENT-APPL-SN-629759	c15 N71-16076
US-PATENT-APPL-SN-605518	c15 N71-23023	US-PATENT-APPL-SN-630579	c35 N77-24454
US-PATENT-APPL-SN-605564	c06 N73-30103	US-PATENT-APPL-SN-630582	c34 N76-13419
US-PATENT-APPL-SN-605594	c06 N73-30101	US-PATENT-APPL-SN-630583	c33 N77-24375
US-PATENT-APPL-SN-606027	c06 N73-30099	US-PATENT-APPL-SN-631341	c60 N76-13781
US-PATENT-APPL-SN-606036	c06 N73-30100	US-PATENT-APPL-SN-631848	c09 N71-12514
US-PATENT-APPL-SN-606462	c08 N71-24891	US-PATENT-APPL-SN-632104	c09 N71-19470
US-PATENT-APPL-SN-606463	c14 N71-24864	US-PATENT-APPL-SN-632111	c37 N76-13500
US-PATENT-APPL-SN-606464	c15 N71-18579	US-PATENT-APPL-SN-632112	c35 N77-22449
US-PATENT-APPL-SN-606891	c44 N77-14581	US-PATENT-APPL-SN-632152	c10 N71-24798
US-PATENT-APPL-SN-607461	c05 N71-12346	US-PATENT-APPL-SN-632154	c09 N69-39984
US-PATENT-APPL-SN-607484	c09 N71-26002	US-PATENT-APPL-SN-632162	c14 N69-39937
US-PATENT-APPL-SN-607608	c14 N69-27484	US-PATENT-APPL-SN-632163	c30 N71-23723
US-PATENT-APPL-SN-607969	c09 N76-23273	US-PATENT-APPL-SN-632164	c15 N69-24319
US-PATENT-APPL-SN-608247	c15 N71-20813	US-PATENT-APPL-SN-632165	c14 N71-46266
US-PATENT-APPL-SN-608482	c74 N77-20882	US-PATENT-APPL-SN-633876	c27 N76-13294
US-PATENT-APPL-SN-608483	c09 N77-19076	US-PATENT-APPL-SN-633877	c27 N77-13217
US-PATENT-APPL-SN-608944	c15 N71-23798	US-PATENT-APPL-SN-634038	c25 N71-16073
US-PATENT-APPL-SN-610723	c14 N71-23755	US-PATENT-APPL-SN-634040	c15 N71-19489
US-PATENT-APPL-SN-610724	c31 N71-28851	US-PATENT-APPL-SN-634060	c09 N69-39897
US-PATENT-APPL-SN-610728	c31 N71-22969	US-PATENT-APPL-SN-634205	c35 N77-14406
US-PATENT-APPL-SN-610801	c76 N77-32919	US-PATENT-APPL-SN-634214	c44 N76-15573
US-PATENT-APPL-SN-610802	c35 N77-20400	US-PATENT-APPL-SN-635325	c14 N69-27431
US-PATENT-APPL-SN-611144	c46 N74-23068	US-PATENT-APPL-SN-635326	c14 N71-18482
US-PATENT-APPL-SN-611144	c46 N74-23069	US-PATENT-APPL-SN-635327	c12 N69-39988
US-PATENT-APPL-SN-612265	c14 N72-22442	US-PATENT-APPL-SN-635328	c09 N69-21467
US-PATENT-APPL-SN-612568	c15 N71-28952	US-PATENT-APPL-SN-635519	c35 N77-24455
US-PATENT-APPL-SN-612740	c25 N71-20563	US-PATENT-APPL-SN-635531	c33 N77-14334
US-PATENT-APPL-SN-612899	c07 N77-18154	US-PATENT-APPL-SN-635970	c15 N69-21465
US-PATENT-APPL-SN-612964	c20 N77-10148	US-PATENT-APPL-SN-635972	c18 N71-23710
US-PATENT-APPL-SN-612965	c52 N77-14735	US-PATENT-APPL-SN-636193	c74 N76-26988
US-PATENT-APPL-SN-612966	c31 N75-32262	US-PATENT-APPL-SN-636878	c14 N71-20442
US-PATENT-APPL-SN-612967	c74 N77-18893	US-PATENT-APPL-SN-637247	c35 N77-10493
US-PATENT-APPL-SN-613004	c71 N77-26919	US-PATENT-APPL-SN-637249	c38 N76-28563
US-PATENT-APPL-SN-613235	c14 N73-30394	US-PATENT-APPL-SN-637268	c47 N77-10753
US-PATENT-APPL-SN-613734	c52 N77-14738	US-PATENT-APPL-SN-637269	c52 N77-28717
US-PATENT-APPL-SN-613979	c33 N71-14035	US-PATENT-APPL-SN-637882	c15 N71-17650
US-PATENT-APPL-SN-615030	c34 N75-32389	US-PATENT-APPL-SN-638192	c10 N71-26415
US-PATENT-APPL-SN-616332	c24 N77-27188	US-PATENT-APPL-SN-638194	c33 N71-21507
US-PATENT-APPL-SN-616333	c33 N76-32457	US-PATENT-APPL-SN-638707	c14 N69-27486
US-PATENT-APPL-SN-616472	c74 N77-22951	US-PATENT-APPL-SN-639589	c28 N70-33372
US-PATENT-APPL-SN-616528	c24 N76-26282	US-PATENT-APPL-SN-640154	c09 N71-18600
US-PATENT-APPL-SN-617021	c23 N71-16101	US-PATENT-APPL-SN-640447	c15 N71-19486
US-PATENT-APPL-SN-617022	c07 N69-27462	US-PATENT-APPL-SN-640448	c08 N71-19420
US-PATENT-APPL-SN-617202	c74 N77-28933	US-PATENT-APPL-SN-640449	c09 N71-19516
US-PATENT-APPL-SN-617612	c52 N77-10780	US-PATENT-APPL-SN-640450	c15 N71-17694
US-PATENT-APPL-SN-617770	c14 N71-23267	US-PATENT-APPL-SN-640452	c09 N71-12513
US-PATENT-APPL-SN-617774	c18 N71-16124	US-PATENT-APPL-SN-640453	c23 N71-16099
US-PATENT-APPL-SN-617775	c06 N71-28807	US-PATENT-APPL-SN-640454	c06 N71-11238
US-PATENT-APPL-SN-617776	c18 N69-39895	US-PATENT-APPL-SN-640455	c10 N71-23099
US-PATENT-APPL-SN-617778	c14 N71-26244	US-PATENT-APPL-SN-640456	c03 N71-26726
US-PATENT-APPL-SN-617779	c09 N69-39929	US-PATENT-APPL-SN-640457	c03 N71-11052
US-PATENT-APPL-SN-617783	c15 N69-24266	US-PATENT-APPL-SN-640458	c15 N71-23811
US-PATENT-APPL-SN-617895	c32 N77-14292	US-PATENT-APPL-SN-640459	c10 N71-18723
US-PATENT-APPL-SN-618594	c37 N77-13418	US-PATENT-APPL-SN-640460	c14 N69-21541
US-PATENT-APPL-SN-618969	c05 N71-26333	US-PATENT-APPL-SN-640462	c15 N71-20443
US-PATENT-APPL-SN-619519	c32 N71-16106	US-PATENT-APPL-SN-640781	c03 N69-25146
US-PATENT-APPL-SN-619520	c05 N69-21380	US-PATENT-APPL-SN-640783	c09 N71-26000
US-PATENT-APPL-SN-619521	c06 N69-39889	US-PATENT-APPL-SN-640784	c15 N69-39945
US-PATENT-APPL-SN-619903	c15 N69-27505	US-PATENT-APPL-SN-640785	c09 N69-24333

NUMBER INDEX

US-PATENT-APPL-SN-640786	.....	c15	N71-24695	US-PATENT-APPL-SN-660842	.....	c14	N71-23726
US-PATENT-APPL-SN-640787	.....	c28	N71-24321	US-PATENT-APPL-SN-660843	.....	c08	N71-24650
US-PATENT-APPL-SN-640788	.....	c15	N69-27502	US-PATENT-APPL-SN-661170	.....	c14	N71-24809
US-PATENT-APPL-SN-640789	.....	c15	N69-27504	US-PATENT-APPL-SN-662175	.....	c09	N77-27131
US-PATENT-APPL-SN-640806	.....	c27	N76-15314	US-PATENT-APPL-SN-662176	.....	c32	N77-21267
US-PATENT-APPL-SN-641420	.....	c03	N71-23449	US-PATENT-APPL-SN-662181	.....	c34	N76-23522
US-PATENT-APPL-SN-641431	.....	c30	N71-16090	US-PATENT-APPL-SN-662182	.....	c19	N76-18227
US-PATENT-APPL-SN-641441	.....	c08	N71-18751	US-PATENT-APPL-SN-662763	.....	c15	N73-12489
US-PATENT-APPL-SN-641784	.....	c37	N77-32499	US-PATENT-APPL-SN-662828	.....	c11	N71-18578
US-PATENT-APPL-SN-641801	.....	c35	N76-14434	US-PATENT-APPL-SN-662829	.....	c15	N71-15597
US-PATENT-APPL-SN-641802	.....	c34	N77-30399	US-PATENT-APPL-SN-663008	.....	c37	N77-28486
US-PATENT-APPL-SN-641803	.....	c35	N76-14433	US-PATENT-APPL-SN-663180	.....	c10	N71-23663
US-PATENT-APPL-SN-641862	.....	c54	N76-15792	US-PATENT-APPL-SN-665032	.....	c74	N77-22950
US-PATENT-APPL-SN-642083	.....	c44	N76-14612	US-PATENT-APPL-SN-665033	.....	c20	N77-20162
US-PATENT-APPL-SN-643041	.....	c44	N76-15603	US-PATENT-APPL-SN-665034	.....	c44	N76-19552
US-PATENT-APPL-SN-643043	.....	c35	N77-19388	US-PATENT-APPL-SN-665209	.....	c14	N71-23725
US-PATENT-APPL-SN-643332	.....	c15	N71-14932	US-PATENT-APPL-SN-665676	.....	c14	N71-19568
US-PATENT-APPL-SN-643385	.....	c31	N76-16245	US-PATENT-APPL-SN-665679	.....	c15	N71-20395
US-PATENT-APPL-SN-643897	.....	c36	N76-15451	US-PATENT-APPL-SN-665680	.....	c24	N71-16213
US-PATENT-APPL-SN-644444	.....	c09	N71-18721	US-PATENT-APPL-SN-665681	.....	c15	N71-18616
US-PATENT-APPL-SN-644446	.....	c14	N71-24693	US-PATENT-APPL-SN-665734	.....	c35	N76-19405
US-PATENT-APPL-SN-644447	.....	c14	N71-24234	US-PATENT-APPL-SN-666551	.....	c14	N71-23698
US-PATENT-APPL-SN-644448	.....	c17	N69-25147	US-PATENT-APPL-SN-666553	.....	c03	N71-11055
US-PATENT-APPL-SN-644799	.....	c17	N71-15468	US-PATENT-APPL-SN-666554	.....	c33	N71-16104
US-PATENT-APPL-SN-645500	.....	c74	N77-28932	US-PATENT-APPL-SN-666555	.....	c07	N71-24614
US-PATENT-APPL-SN-645502	.....	c24	N76-19234	US-PATENT-APPL-SN-666952	.....	c27	N77-30236
US-PATENT-APPL-SN-645503	.....	c44	N76-16621	US-PATENT-APPL-SN-667010	.....	c34	N77-27345
US-PATENT-APPL-SN-645507	.....	c26	N77-32280	US-PATENT-APPL-SN-667625	.....	c41	N71-15674
US-PATENT-APPL-SN-645508	.....	c44	N77-14580	US-PATENT-APPL-SN-667636	.....	c03	N71-20491
US-PATENT-APPL-SN-645510	.....	c32	N77-30308	US-PATENT-APPL-SN-667637	.....	c28	N71-14044
US-PATENT-APPL-SN-645563	.....	c31	N71-20396	US-PATENT-APPL-SN-667928	.....	c35	N77-30436
US-PATENT-APPL-SN-645571	.....	c35	N77-14407	US-PATENT-APPL-SN-667929	.....	c35	N76-19407
US-PATENT-APPL-SN-645573	.....	c24	N71-25555	US-PATENT-APPL-SN-667930	.....	c32	N77-28346
US-PATENT-APPL-SN-645584	.....	c08	N71-12494	US-PATENT-APPL-SN-668116	.....	c35	N76-16391
US-PATENT-APPL-SN-646124	.....	c15	N71-23817	US-PATENT-APPL-SN-668238	.....	c15	N71-15608
US-PATENT-APPL-SN-646424	.....	c07	N69-27460	US-PATENT-APPL-SN-668241	.....	c15	N71-17685
US-PATENT-APPL-SN-646704	.....	c36	N77-25499	US-PATENT-APPL-SN-668242	.....	c10	N71-27272
US-PATENT-APPL-SN-646934	.....	c08	N71-18692	US-PATENT-APPL-SN-668247	.....	c09	N71-20445
US-PATENT-APPL-SN-647298	.....	c31	N71-16102	US-PATENT-APPL-SN-668248	.....	c10	N71-26331
US-PATENT-APPL-SN-648700	.....	c35	N76-17369	US-PATENT-APPL-SN-668249	.....	c03	N71-20407
US-PATENT-APPL-SN-649C75	.....	c14	N71-15600	US-PATENT-APPL-SN-668257	.....	c23	N76-16100
US-PATENT-APPL-SN-649076	.....	c08	N71-24890	US-PATENT-APPL-SN-668302	.....	c07	N71-12390
US-PATENT-APPL-SN-649C78	.....	c07	N71-19493	US-PATENT-APPL-SN-668751	.....	c06	N71-11237
US-PATENT-APPL-SN-649356	.....	c09	N71-23189	US-PATENT-APPL-SN-668755	.....	c15	N71-17693
US-PATENT-APPL-SN-649357	.....	c08	N71-12500	US-PATENT-APPL-SN-668771	.....	c35	N77-17430
US-PATENT-APPL-SN-649358	.....	c07	N71-11267	US-PATENT-APPL-SN-668968	.....	c09	N71-12515
US-PATENT-APPL-SN-649359	.....	c15	N71-18701	US-PATENT-APPL-SN-668969	.....	c08	N71-19288
US-PATENT-APPL-SN-649360	.....	c23	N71-16365	US-PATENT-APPL-SN-669336	.....	c15	N71-17651
US-PATENT-APPL-SN-650166	.....	c09	N71-23191	US-PATENT-APPL-SN-669928	.....	c44	N77-22607
US-PATENT-APPL-SN-651007	.....	c74	N76-18917	US-PATENT-APPL-SN-670814	.....	c03	N71-19545
US-PATENT-APPL-SN-651009	.....	c26	N76-17233	US-PATENT-APPL-SN-670829	.....	c28	N72-23809
US-PATENT-APPL-SN-651627	.....	c26	N72-25679	US-PATENT-APPL-SN-672210	.....	c20	N76-20215
US-PATENT-APPL-SN-651972	.....	c27	N74-23125	US-PATENT-APPL-SN-672219	.....	c37	N76-20488
US-PATENT-APPL-SN-652948	.....	c52	N77-14736	US-PATENT-APPL-SN-672220	.....	c37	N76-20486
US-PATENT-APPL-SN-653277	.....	c31	N71-23912	US-PATENT-APPL-SN-672221	.....	c07	N76-22202
US-PATENT-APPL-SN-653278	.....	c14	N69-27503	US-PATENT-APPL-SN-672222	.....	c37	N76-20487
US-PATENT-APPL-SN-653316	.....	c25	N77-32255	US-PATENT-APPL-SN-672223	.....	c37	N76-20485
US-PATENT-APPL-SN-653422	.....	c35	N77-20401	US-PATENT-APPL-SN-672382	.....	c15	N71-23815
US-PATENT-APPL-SN-653681	.....	c39	N76-17427	US-PATENT-APPL-SN-672383	.....	c15	N71-24045
US-PATENT-APPL-SN-654787	.....	c07	N77-32148	US-PATENT-APPL-SN-672384	.....	c15	N71-27067
US-PATENT-APPL-SN-655149	.....	c07	N77-23106	US-PATENT-APPL-SN-672388	.....	c26	N72-17820
US-PATENT-APPL-SN-655675	.....	c17	N71-24142	US-PATENT-APPL-SN-672695	.....	c27	N76-23436
US-PATENT-APPL-SN-655677	.....	c08	N71-19432	US-PATENT-APPL-SN-672815	.....	c37	N77-23482
US-PATENT-APPL-SN-655724	.....	c15	N71-22706	US-PATENT-APPL-SN-673226	.....	c08	N71-12502
US-PATENT-APPL-SN-656952	.....	c09	N71-12519	US-PATENT-APPL-SN-673227	.....	c11	N71-24964
US-PATENT-APPL-SN-656953	.....	c14	N71-17585	US-PATENT-APPL-SN-673228	.....	c07	N71-19433
US-PATENT-APPL-SN-656953	.....	c09	N71-24843	US-PATENT-APPL-SN-673229	.....	c33	N71-15641
US-PATENT-APPL-SN-656995	.....	c21	N71-14132	US-PATENT-APPL-SN-674194	.....	c24	N76-26281
US-PATENT-APPL-SN-657742	.....	c18	N71-26100	US-PATENT-APPL-SN-674195	.....	c74	N76-23985
US-PATENT-APPL-SN-657903	.....	c07	N76-18131	US-PATENT-APPL-SN-674340	.....	c07	N76-22198
US-PATENT-APPL-SN-657907	.....	c27	N76-24408	US-PATENT-APPL-SN-674355	.....	c14	N71-20429
US-PATENT-APPL-SN-657995	.....	c35	N77-22450	US-PATENT-APPL-SN-674356	.....	c14	N71-23699
US-PATENT-APPL-SN-657996	.....	c60	N76-18803	US-PATENT-APPL-SN-674357	.....	c05	N71-12351
US-PATENT-APPL-SN-657997	.....	c60	N77-32731	US-PATENT-APPL-SN-674700	.....	c27	N77-31308
US-PATENT-APPL-SN-657998	.....	c27	N76-24409	US-PATENT-APPL-SN-675238	.....	c10	N71-26374
US-PATENT-APPL-SN-658132	.....	c44	N77-32580	US-PATENT-APPL-SN-675328	.....	c35	N77-24456
US-PATENT-APPL-SN-658133	.....	c71	N76-18886	US-PATENT-APPL-SN-676012	.....	c05	N71-11193
US-PATENT-APPL-SN-658449	.....	c32	N77-20289	US-PATENT-APPL-SN-676351	.....	c35	N76-26450
US-PATENT-APPL-SN-658450	.....	c37	N77-22482	US-PATENT-APPL-SN-676375	.....	c14	N71-18483
US-PATENT-APPL-SN-658487	.....	c37	N77-17466	US-PATENT-APPL-SN-676386	.....	c08	N71-12507
US-PATENT-APPL-SN-658555	.....	c14	N71-15605	US-PATENT-APPL-SN-676387	.....	c10	N71-25950
US-PATENT-APPL-SN-658956	.....	c15	N71-15607	US-PATENT-APPL-SN-676391	.....	c21	N71-11766
US-PATENT-APPL-SN-658957	.....	c14	N71-17584	US-PATENT-APPL-SN-676432	.....	c28	N76-22399
US-PATENT-APPL-SN-658964	.....	c19	N71-26674	US-PATENT-APPL-SN-676433	.....	c52	N77-28716
US-PATENT-APPL-SN-659882	.....	c26	N76-18262	US-PATENT-APPL-SN-676957	.....	c32	N77-18307
US-PATENT-APPL-SN-660571	.....	c26	N71-23654	US-PATENT-APPL-SN-676958	.....	c54	N76-22914
US-PATENT-APPL-SN-660572	.....	c15	N71-15571	US-PATENT-APPL-SN-677351	.....	c35	N77-32455
US-PATENT-APPL-SN-660573	.....	c15	N71-28936	US-PATENT-APPL-SN-677352	.....	c43	N76-23671
US-PATENT-APPL-SN-660841	.....	c14	N71-15621	US-PATENT-APPL-SN-677353	.....	c52	N76-23837

NUMBER INDEX

US-PATENT-APPL-SN-677475	c32	N71-26681	US-PATENT-APPL-SN-693419	c31	N71-16222
US-PATENT-APPL-SN-677476	c14	N71-17586	US-PATENT-APPL-SN-693420	c31	N71-16080
US-PATENT-APPL-SN-677505	c09	N71-13521	US-PATENT-APPL-SN-694246	c15	N71-26671
US-PATENT-APPL-SN-677506	c16	N71-15567	US-PATENT-APPL-SN-694247	c09	N69-21927
US-PATENT-APPL-SN-677508	c16	N71-15551	US-PATENT-APPL-SN-694317	c12	N71-20438
US-PATENT-APPL-SN-678520	c20	N76-29365	US-PATENT-APPL-SN-694340	c11	N71-17605
US-PATENT-APPL-SN-678700	c05	N71-19439	US-PATENT-APPL-SN-694345	c10	N71-23665
US-PATENT-APPL-SN-679055	c08	N71-24633	US-PATENT-APPL-SN-694402	c09	N76-26224
US-PATENT-APPL-SN-679862	c20	N71-16340	US-PATENT-APPL-SN-694406	c35	N76-26449
US-PATENT-APPL-SN-679885	c09	N71-12521	US-PATENT-APPL-SN-694407	c27	N77-18265
US-PATENT-APPL-SN-680015	c52	N77-26797	US-PATENT-APPL-SN-694855	c33	N77-30365
US-PATENT-APPL-SN-680067	c07	N77-27116	US-PATENT-APPL-SN-695973	c05	N71-12343
US-PATENT-APPL-SN-680938	c74	N77-26942	US-PATENT-APPL-SN-696989	c27	N77-30237
US-PATENT-APPL-SN-680939	c44	N76-26690	US-PATENT-APPL-SN-697075	c15	N71-27184
US-PATENT-APPL-SN-680957	c35	N77-27366	US-PATENT-APPL-SN-697341	c09	N71-23188
US-PATENT-APPL-SN-680958	c33	N76-23482	US-PATENT-APPL-SN-698592	c15	N71-18580
US-PATENT-APPL-SN-681000	c37	N76-23585	US-PATENT-APPL-SN-698629	c09	N71-12516
US-PATENT-APPL-SN-681001	c74	N76-22993	US-PATENT-APPL-SN-698630	c09	N71-24841
US-PATENT-APPL-SN-681017	c44	N77-32583	US-PATENT-APPL-SN-698646	c24	N76-26286
US-PATENT-APPL-SN-681096	c44	N77-32582	US-PATENT-APPL-SN-699002	c32	N76-31373
US-PATENT-APPL-SN-681687	c03	N71-20273	US-PATENT-APPL-SN-699012	c33	N76-26394
US-PATENT-APPL-SN-681692	c08	N71-12506	US-PATENT-APPL-SN-700040	c18	N72-23581
US-PATENT-APPL-SN-681693	c09	N71-18598	US-PATENT-APPL-SN-700120	c15	N71-20440
US-PATENT-APPL-SN-681942	c18	N71-15688	US-PATENT-APPL-SN-700142	c21	N71-14159
US-PATENT-APPL-SN-682416	c34	N77-24423	US-PATENT-APPL-SN-700174	c02	N71-20570
US-PATENT-APPL-SN-682435	c27	N77-32308	US-PATENT-APPL-SN-700541	c10	N71-25139
US-PATENT-APPL-SN-683507	c15	N71-15609	US-PATENT-APPL-SN-700586	c15	N71-19570
US-PATENT-APPL-SN-683606	c09	N71-24717	US-PATENT-APPL-SN-700673	c39	N77-28511
US-PATENT-APPL-SN-683612	c01	N69-39981	US-PATENT-APPL-SN-700984	c11	N71-19494
US-PATENT-APPL-SN-683613	c15	N71-15610	US-PATENT-APPL-SN-700985	c15	N69-23190
US-PATENT-APPL-SN-684083	c09	N71-24596	US-PATENT-APPL-SN-700986	c12	N71-26387
US-PATENT-APPL-SN-684178	c15	N71-23812	US-PATENT-APPL-SN-700987	c09	N71-19610
US-PATENT-APPL-SN-684209	c10	N71-19418	US-PATENT-APPL-SN-701244	c05	N72-20096
US-PATENT-APPL-SN-684807	c75	N76-24001	US-PATENT-APPL-SN-701448	c54	N76-26871
US-PATENT-APPL-SN-684809	c33	N76-26393	US-PATENT-APPL-SN-701635	c12	N71-17578
US-PATENT-APPL-SN-684810	c33	N76-23483	US-PATENT-APPL-SN-701654	c03	N71-11049
US-PATENT-APPL-SN-684894	c17	N71-26773	US-PATENT-APPL-SN-701679	c02	N71-19287
US-PATENT-APPL-SN-685027	c25	N76-23387	US-PATENT-APPL-SN-701679	c07	N73-20174
US-PATENT-APPL-SN-685463	c15	N71-23254	US-PATENT-APPL-SN-701732	c24	N71-16095
US-PATENT-APPL-SN-685473	c17	N71-16044	US-PATENT-APPL-SN-701733	c10	N71-24844
US-PATENT-APPL-SN-685497	c07	N69-39974	US-PATENT-APPL-SN-701744	c21	N71-13958
US-PATENT-APPL-SN-685748	c07	N71-11282	US-PATENT-APPL-SN-701767	c07	N71-26101
US-PATENT-APPL-SN-685750	c27	N71-16392	US-PATENT-APPL-SN-702396	c31	N71-16345
US-PATENT-APPL-SN-685764	c14	N69-27459	US-PATENT-APPL-SN-702911	c15	N71-24875
US-PATENT-APPL-SN-685766	c15	N69-21924	US-PATENT-APPL-SN-702967	c06	N71-24739
US-PATENT-APPL-SN-685787	c14	N71-18625	US-PATENT-APPL-SN-703107	c37	N77-22479
US-PATENT-APPL-SN-686209	c15	N71-23809	US-PATENT-APPL-SN-704180	c36	N77-19418
US-PATENT-APPL-SN-686248	c14	N71-26774	US-PATENT-APPL-SN-704224	c18	N71-15469
US-PATENT-APPL-SN-686296	c18	N71-14014	US-PATENT-APPL-SN-704299	c10	N71-26577
US-PATENT-APPL-SN-686331	c35	N76-24529	US-PATENT-APPL-SN-704420	c05	N71-11202
US-PATENT-APPL-SN-686344	c15	N71-17688	US-PATENT-APPL-SN-704446	c10	N71-33407
US-PATENT-APPL-SN-686449	c24	N76-23359	US-PATENT-APPL-SN-704465	c07	N71-24741
US-PATENT-APPL-SN-686796	c15	N70-33311	US-PATENT-APPL-SN-704668	c10	N71-12554
US-PATENT-APPL-SN-686933	c14	N71-17588	US-PATENT-APPL-SN-706013	c33	N71-27862
US-PATENT-APPL-SN-687251	c52	N77-19750	US-PATENT-APPL-SN-706424	c27	N76-28425
US-PATENT-APPL-SN-687822	c44	N76-23713	US-PATENT-APPL-SN-706425	c33	N76-28471
US-PATENT-APPL-SN-688742	c15	N71-20441	US-PATENT-APPL-SN-706564	c14	N71-17587
US-PATENT-APPL-SN-688743	c15	N71-20393	US-PATENT-APPL-SN-707124	c44	N77-22606
US-PATENT-APPL-SN-688805	c14	N71-17701	US-PATENT-APPL-SN-707125	c35	N76-28530
US-PATENT-APPL-SN-688807	c03	N71-23239	US-PATENT-APPL-SN-707440	c06	N73-30102
US-PATENT-APPL-SN-688852	c44	N76-26692	US-PATENT-APPL-SN-707495	c11	N71-18773
US-PATENT-APPL-SN-688854	c54	N77-32722	US-PATENT-APPL-SN-708658	c33	N77-26385
US-PATENT-APPL-SN-688856	c35	N76-26448	US-PATENT-APPL-SN-708659	c33	N76-28472
US-PATENT-APPL-SN-688868	c15	N71-17686	US-PATENT-APPL-SN-708660	c44	N76-28646
US-PATENT-APPL-SN-688879	c24	N76-26284	US-PATENT-APPL-SN-708771	c26	N76-29401
US-PATENT-APPL-SN-689455	c54	N76-32546	US-PATENT-APPL-SN-708795	c37	N77-28487
US-PATENT-APPL-SN-690163	c14	N71-18465	US-PATENT-APPL-SN-708796	c36	N76-31514
US-PATENT-APPL-SN-690172	c11	N72-22245	US-PATENT-APPL-SN-708800	c37	N76-28554
US-PATENT-APPL-SN-690815	c32	N77-24328	US-PATENT-APPL-SN-708951	c27	N76-28421
US-PATENT-APPL-SN-690816	c37	N76-26511	US-PATENT-APPL-SN-709398	c06	N71-13461
US-PATENT-APPL-SN-690997	c16	N71-24828	US-PATENT-APPL-SN-709399	c16	N71-26154
US-PATENT-APPL-SN-690998	c30	N71-15990	US-PATENT-APPL-SN-709622	c33	N71-24858
US-PATENT-APPL-SN-691046	c36	N77-25501	US-PATENT-APPL-SN-709849	c52	N77-25772
US-PATENT-APPL-SN-691256	c35	N77-31465	US-PATENT-APPL-SN-710032	c54	N77-30749
US-PATENT-APPL-SN-691647	c52	N76-27839	US-PATENT-APPL-SN-710035	c44	N76-30652
US-PATENT-APPL-SN-691735	c09	N71-12520	US-PATENT-APPL-SN-710533	c02	N71-11043
US-PATENT-APPL-SN-691736	c18	N71-16210	US-PATENT-APPL-SN-710561	c09	N71-12517
US-PATENT-APPL-SN-691737	c07	N71-24742	US-PATENT-APPL-SN-710562	c31	N71-16085
US-PATENT-APPL-SN-691738	c08	N71-18694	US-PATENT-APPL-SN-710621	c06	N73-27086
US-PATENT-APPL-SN-691739	c32	N71-15974	US-PATENT-APPL-SN-710945	c33	N71-15568
US-PATENT-APPL-SN-691909	c05	N71-24606	US-PATENT-APPL-SN-710949	c12	N71-17631
US-PATENT-APPL-SN-691936	c26	N77-32279	US-PATENT-APPL-SN-711898	c18	N71-24934
US-PATENT-APPL-SN-692284	c27	N77-22257	US-PATENT-APPL-SN-711903	c18	N71-26772
US-PATENT-APPL-SN-692331	c10	N71-26326	US-PATENT-APPL-SN-711921	c18	N71-16105
US-PATENT-APPL-SN-692332	c07	N71-11281	US-PATENT-APPL-SN-711970	c09	N71-18830
US-PATENT-APPL-SN-692413	c72	N76-27967	US-PATENT-APPL-SN-711971	c09	N71-23598
US-PATENT-APPL-SN-692414	c32	N77-24331	US-PATENT-APPL-SN-711972	c06	N71-24607
US-PATENT-APPL-SN-692471	c09	N71-12518	US-PATENT-APPL-SN-712065	c08	N71-12503
US-PATENT-APPL-SN-693074	c44	N76-26695	US-PATENT-APPL-SN-712099	c23	N71-24868

NUMBER INDEX

US-PATENT-APPL-SN-712419	c35	N76-28535	US-PATENT-APPL-SN-737975	c32	N77-12248
US-PATENT-APPL-SN-712658	c07	N71-19773	US-PATENT-APPL-SN-738119	c18	N71-15545
US-PATENT-APPL-SN-712981	c31	N77-15219	US-PATENT-APPL-SN-738218	c35	N77-10498
US-PATENT-APPL-SN-713162	c06	N71-26754	US-PATENT-APPL-SN-738219	c36	N77-10517
US-PATENT-APPL-SN-713188	c08	N71-33110	US-PATENT-APPL-SN-738314	c12	N71-17573
US-PATENT-APPL-SN-713616	c06	N71-27363	US-PATENT-APPL-SN-738315	c14	N71-27334
US-PATENT-APPL-SN-714158	c76	N76-30084	US-PATENT-APPL-SN-738315	c14	N72-31446
US-PATENT-APPL-SN-714296	c14	N71-15604	US-PATENT-APPL-SN-739072	c33	N75-27251
US-PATENT-APPL-SN-714595	c15	N71-17822	US-PATENT-APPL-SN-739391	c09	N72-17156
US-PATENT-APPL-SN-715485	c74	N77-15826	US-PATENT-APPL-SN-739908	c13	N77-11079
US-PATENT-APPL-SN-715975	c06	N71-11240	US-PATENT-APPL-SN-739909	c37	N77-13426
US-PATENT-APPL-SN-716183	c15	N71-18132	US-PATENT-APPL-SN-739914	c33	N77-13335
US-PATENT-APPL-SN-716734	c15	N71-17628	US-PATENT-APPL-SN-739915	c07	N77-13062
US-PATENT-APPL-SN-716755	c14	N71-20435	US-PATENT-APPL-SN-739927	c32	N71-16103
US-PATENT-APPL-SN-717052	c14	N71-17626	US-PATENT-APPL-SN-740153	c28	N77-17258
US-PATENT-APPL-SN-717319	c44	N77-31601	US-PATENT-APPL-SN-740155	c35	N77-10497
US-PATENT-APPL-SN-717320	c44	N76-32649	US-PATENT-APPL-SN-740156	c35	N77-23441
US-PATENT-APPL-SN-717822	c09	N71-25866	US-PATENT-APPL-SN-740457	c35	N77-11364
US-PATENT-APPL-SN-718095	c28	N70-39899	US-PATENT-APPL-SN-741461	c12	N71-18603
US-PATENT-APPL-SN-718244	c05	N76-31219	US-PATENT-APPL-SN-741824	c07	N71-12389
US-PATENT-APPL-SN-718266	c35	N77-11363	US-PATENT-APPL-SN-742034	c33	N77-17359
US-PATENT-APPL-SN-718267	c26	N77-29260	US-PATENT-APPL-SN-742035	c05	N77-15027
US-PATENT-APPL-SN-718268	c37	N77-11398	US-PATENT-APPL-SN-742816	c14	N71-17656
US-PATENT-APPL-SN-718279	c15	N71-26312	US-PATENT-APPL-SN-743249	c35	N77-32456
US-PATENT-APPL-SN-718689	c14	N71-17655	US-PATENT-APPL-SN-743429	c07	N71-11285
US-PATENT-APPL-SN-718752	c03	N71-18698	US-PATENT-APPL-SN-743525	c07	N71-28430
US-PATENT-APPL-SN-718769	c14	N71-17662	US-PATENT-APPL-SN-744477	c33	N77-17358
US-PATENT-APPL-SN-719029	c14	N71-27186	US-PATENT-APPL-SN-744522	c33	N77-21314
US-PATENT-APPL-SN-719173	c28	N70-33331	US-PATENT-APPL-SN-744542	c34	N77-12332
US-PATENT-APPL-SN-719869	c31	N71-15676	US-PATENT-APPL-SN-744573	c44	N77-12511
US-PATENT-APPL-SN-719870	c07	N71-26292	US-PATENT-APPL-SN-744574	c25	N77-12157
US-PATENT-APPL-SN-720041	c05	N71-27234	US-PATENT-APPL-SN-744576	c44	N77-32595
US-PATENT-APPL-SN-720125	c09	N71-12539	US-PATENT-APPL-SN-744577	c32	N77-17325
US-PATENT-APPL-SN-720521	c44	N76-31674	US-PATENT-APPL-SN-744910	c15	N71-17649
US-PATENT-APPL-SN-720546	c18	N72-17532	US-PATENT-APPL-SN-745337	c28	N72-20758
US-PATENT-APPL-SN-721150	c37	N76-31529	US-PATENT-APPL-SN-745852	c12	N71-17661
US-PATENT-APPL-SN-721617	c18	N71-25881	US-PATENT-APPL-SN-746265	c44	N77-15490
US-PATENT-APPL-SN-723264	c24	N77-15103	US-PATENT-APPL-SN-746578	c09	N77-12070
US-PATENT-APPL-SN-723465	c15	N72-29488	US-PATENT-APPL-SN-746579	c33	N77-13338
US-PATENT-APPL-SN-723465	c37	N74-15125	US-PATENT-APPL-SN-746580	c34	N77-15343
US-PATENT-APPL-SN-723476	c05	N71-12341	US-PATENT-APPL-SN-747674	c27	N77-14262
US-PATENT-APPL-SN-723488	c09	N71-28691	US-PATENT-APPL-SN-747675	c37	N77-15400
US-PATENT-APPL-SN-723804	c09	N71-24806	US-PATENT-APPL-SN-749121	c07	N72-11149
US-PATENT-APPL-SN-723805	c10	N71-26339	US-PATENT-APPL-SN-749148	c10	N71-19421
US-PATENT-APPL-SN-723827	c10	N71-27137	US-PATENT-APPL-SN-749149	c15	N71-24897
US-PATENT-APPL-SN-723851	c15	N71-17696	US-PATENT-APPL-SN-749181	c09	N71-24803
US-PATENT-APPL-SN-724874	c76	N76-32029	US-PATENT-APPL-SN-749320	c14	N72-22443
US-PATENT-APPL-SN-725405	c15	N71-26134	US-PATENT-APPL-SN-749420	c04	N77-12031
US-PATENT-APPL-SN-725432	c07	N71-24622	US-PATENT-APPL-SN-749548	c10	N71-33129
US-PATENT-APPL-SN-725475	c31	N71-15643	US-PATENT-APPL-SN-750031	c05	N73-20212
US-PATENT-APPL-SN-725719	c15	N71-26243	US-PATENT-APPL-SN-750235	c25	N75-14844
US-PATENT-APPL-SN-725828	c06	N76-31229	US-PATENT-APPL-SN-750786	c07	N71-27341
US-PATENT-APPL-SN-726898	c12	N71-17579	US-PATENT-APPL-SN-750787	c10	N71-27126
US-PATENT-APPL-SN-726910	c27	N77-10201	US-PATENT-APPL-SN-750792	c37	N77-15397
US-PATENT-APPL-SN-727480	c14	N71-17658	US-PATENT-APPL-SN-750796	c32	N77-15233
US-PATENT-APPL-SN-727503	c08	N77-22147	US-PATENT-APPL-SN-750798	c85	N77-17949
US-PATENT-APPL-SN-727725	c44	N76-33624	US-PATENT-APPL-SN-751061	c18	N71-29040
US-PATENT-APPL-SN-728234	c03	N71-12255	US-PATENT-APPL-SN-751198	c03	N71-24718
US-PATENT-APPL-SN-728369	c52	N76-33835	US-PATENT-APPL-SN-751215	c22	N72-20597
US-PATENT-APPL-SN-728299	c03	N72-15986	US-PATENT-APPL-SN-751266	c15	N71-33518
US-PATENT-APPL-SN-730045	c32	N77-11269	US-PATENT-APPL-SN-752729	c09	N71-26787
US-PATENT-APPL-SN-730046	c35	N76-33469	US-PATENT-APPL-SN-752748	c35	N77-28470
US-PATENT-APPL-SN-730162	c09	N71-18599	US-PATENT-APPL-SN-752946	c15	N71-29032
US-PATENT-APPL-SN-730700	c07	N71-24583	US-PATENT-APPL-SN-752947	c31	N71-15689
US-PATENT-APPL-SN-730701	c12	N71-18615	US-PATENT-APPL-SN-753964	c34	N77-14372
US-PATENT-APPL-SN-730702	c33	N71-16356	US-PATENT-APPL-SN-753965	c54	N77-15641
US-PATENT-APPL-SN-730703	c10	N71-13537	US-PATENT-APPL-SN-753971	c07	N77-15036
US-PATENT-APPL-SN-730733	c28	N71-16224	US-PATENT-APPL-SN-753974	c16	N71-33410
US-PATENT-APPL-SN-730734	c15	N71-17654	US-PATENT-APPL-SN-753976	c54	N77-14742
US-PATENT-APPL-SN-730778	c32	N76-33364	US-PATENT-APPL-SN-753977	c44	N77-15493
US-PATENT-APPL-SN-730779	c35	N76-33470	US-PATENT-APPL-SN-753978	c54	N77-14743
US-PATENT-APPL-SN-730780	c05	N77-31132	US-PATENT-APPL-SN-754019	c09	N71-25999
US-PATENT-APPL-SN-731388	c15	N71-24835	US-PATENT-APPL-SN-754020	c12	N71-27332
US-PATENT-APPL-SN-732455	c22	N71-28759	US-PATENT-APPL-SN-754055	c07	N71-24624
US-PATENT-APPL-SN-732630	c36	N77-10516	US-PATENT-APPL-SN-754066	c32	N77-15236
US-PATENT-APPL-SN-732917	c14	N71-17575	US-PATENT-APPL-SN-755310	c45	N77-17609
US-PATENT-APPL-SN-732921	c10	N71-26544	US-PATENT-APPL-SN-755323	c74	N77-14842
US-PATENT-APPL-SN-732922	c17	N71-28747	US-PATENT-APPL-SN-756260	c23	N71-26722
US-PATENT-APPL-SN-733039	c07	N72-12081	US-PATENT-APPL-SN-756266	c15	N71-26145
US-PATENT-APPL-SN-733814	c02	N77-22045	US-PATENT-APPL-SN-756381	c06	N71-25929
US-PATENT-APPL-SN-733825	c27	N77-10198	US-PATENT-APPL-SN-756511	c09	N71-27016
US-PATENT-APPL-SN-734805	c14	N70-34816	US-PATENT-APPL-SN-756834	c15	N72-21466
US-PATENT-APPL-SN-734901	c27	N77-15192	US-PATENT-APPL-SN-757017	c35	N77-21393
US-PATENT-APPL-SN-734902	c24	N77-11119	US-PATENT-APPL-SN-757625	c09	N71-26701
US-PATENT-APPL-SN-735911	c14	N70-41946	US-PATENT-APPL-SN-757857	c10	N71-25900
US-PATENT-APPL-SN-736286	c32	N77-12247	US-PATENT-APPL-SN-757861	c05	N71-11194
US-PATENT-APPL-SN-736848	c23	N71-16212	US-PATENT-APPL-SN-757875	c09	N71-24805
US-PATENT-APPL-SN-736909	c37	N77-11403	US-PATENT-APPL-SN-758082	c15	N71-17805
US-PATENT-APPL-SN-737974	c33	N77-11296	US-PATENT-APPL-SN-758390	c28	N71-26642

NUMBER INDEX

US-PATENT-APPL-SN-758540	c28	N73-27699	US-PATENT-APPL-SN-773029	c09	N71-24893
US-PATENT-APPL-SN-758721	c52	N77-15621	US-PATENT-APPL-SN-773072	c10	N72-28241
US-PATENT-APPL-SN-758942	c27	N71-14090	US-PATENT-APPL-SN-773530	c25	N75-29192
US-PATENT-APPL-SN-755256	c07	N71-27233	US-PATENT-APPL-SN-774151	c15	N71-17692
US-PATENT-APPL-SN-759457	c33	N71-16357	US-PATENT-APPL-SN-774265	c10	N71-27365
US-PATENT-APPL-SN-759460	c09	N71-24597	US-PATENT-APPL-SN-774266	c15	N71-26185
US-PATENT-APPL-SN-759665	c14	N71-18481	US-PATENT-APPL-SN-774553	c32	N77-20299
US-PATENT-APPL-SN-759965	c52	N77-15619	US-PATENT-APPL-SN-774691	c10	N72-31273
US-PATENT-APPL-SN-760057	c37	N77-22484	US-PATENT-APPL-SN-774733	c14	N72-24477
US-PATENT-APPL-SN-760114	c28	N72-11709	US-PATENT-APPL-SN-775072	c16	N71-24831
US-PATENT-APPL-SN-760389	c09	N71-24618	US-PATENT-APPL-SN-775235	c05	N77-18134
US-PATENT-APPL-SN-760771	c44	N77-17565	US-PATENT-APPL-SN-775870	c09	N71-24800
US-PATENT-APPL-SN-760795	c52	N77-18733	US-PATENT-APPL-SN-775870	c09	N72-22196
US-PATENT-APPL-SN-760809	c24	N77-15105	US-PATENT-APPL-SN-775877	c02	N71-11039
US-PATENT-APPL-SN-760810	c25	N77-17178	US-PATENT-APPL-SN-775966	c02	N71-11037
US-PATENT-APPL-SN-760819	c14	N70-34820	US-PATENT-APPL-SN-776029	c07	N77-18160
US-PATENT-APPL-SN-760927	c26	N71-25490	US-PATENT-APPL-SN-776146	c44	N77-18560
US-PATENT-APPL-SN-760928	c15	N71-28582	US-PATENT-APPL-SN-776185	c03	N72-22041
US-PATENT-APPL-SN-761007	c18	N71-26155	US-PATENT-APPL-SN-776869	c44	N77-17564
US-PATENT-APPL-SN-761404	c09	N71-12526	US-PATENT-APPL-SN-777764	c15	N71-27214
US-PATENT-APPL-SN-762362	c44	N77-20565	US-PATENT-APPL-SN-777765	c15	N71-29018
US-PATENT-APPL-SN-762363	c44	N77-20566	US-PATENT-APPL-SN-777766	c31	N71-16221
US-PATENT-APPL-SN-762438	c12	N71-17569	US-PATENT-APPL-SN-777818	c09	N71-27364
US-PATENT-APPL-SN-762935	c14	N71-29041	US-PATENT-APPL-SN-777983	c32	N77-24340
US-PATENT-APPL-SN-762936	c31	N69-27499	US-PATENT-APPL-SN-778195	c24	N77-19173
US-PATENT-APPL-SN-762956	c14	N71-26627	US-PATENT-APPL-SN-779024	c10	N71-27271
US-PATENT-APPL-SN-762957	c08	N71-27210	US-PATENT-APPL-SN-779025	c09	N72-23171
US-PATENT-APPL-SN-763040	c14	N72-28438	US-PATENT-APPL-SN-779160	c14	N72-16282
US-PATENT-APPL-SN-763355	c06	N71-28620	US-PATENT-APPL-SN-779169	c09	N71-28618
US-PATENT-APPL-SN-763684	c15	N72-16329	US-PATENT-APPL-SN-779415	c60	N77-24781
US-PATENT-APPL-SN-763685	c15	N71-24910	US-PATENT-APPL-SN-779428	c35	N77-20408
US-PATENT-APPL-SN-763705	c09	N71-18720	US-PATENT-APPL-SN-779429	c08	N77-31176
US-PATENT-APPL-SN-763706	c15	N71-24896	US-PATENT-APPL-SN-779847	c15	N71-27091
US-PATENT-APPL-SN-763729	c12	N71-26546	US-PATENT-APPL-SN-779871	c33	N77-20344
US-PATENT-APPL-SN-763743	c14	N72-21409	US-PATENT-APPL-SN-779883	c27	N77-20256
US-PATENT-APPL-SN-763744	c10	N72-27246	US-PATENT-APPL-SN-780064	c15	N71-27372
US-PATENT-APPL-SN-763753	c36	N77-18429	US-PATENT-APPL-SN-780065	c12	N71-28741
US-PATENT-APPL-SN-763868	c15	N71-24679	US-PATENT-APPL-SN-780568	c06	N77-20098
US-PATENT-APPL-SN-763869	c17	N71-16393	US-PATENT-APPL-SN-780569	c54	N77-25784
US-PATENT-APPL-SN-764245	c24	N77-32249	US-PATENT-APPL-SN-780728	c32	N77-24338
US-PATENT-APPL-SN-764252	c14	N71-25901	US-PATENT-APPL-SN-780729	c33	N77-21321
US-PATENT-APPL-SN-764253	c33	N77-17357	US-PATENT-APPL-SN-780873	c35	N77-20410
US-PATENT-APPL-SN-764470	c16	N71-28554	US-PATENT-APPL-SN-780874	c33	N77-20343
US-PATENT-APPL-SN-764812	c10	N71-19468	US-PATENT-APPL-SN-780930	c54	N77-21847
US-PATENT-APPL-SN-765123	c31	N71-15687	US-PATENT-APPL-SN-782462	c33	N77-20341
US-PATENT-APPL-SN-765138	c44	N77-19581	US-PATENT-APPL-SN-782463	c36	N77-24468
US-PATENT-APPL-SN-765139	c44	N77-19579	US-PATENT-APPL-SN-782464	c32	N77-24341
US-PATENT-APPL-SN-765165	c33	N77-19320	US-PATENT-APPL-SN-782480	c33	N77-21322
US-PATENT-APPL-SN-765167	c32	N77-19290	US-PATENT-APPL-SN-782481	c44	N77-21666
US-PATENT-APPL-SN-765264	c02	N71-29128	US-PATENT-APPL-SN-782482	c33	N77-21319
US-PATENT-APPL-SN-765738	c03	N71-11057	US-PATENT-APPL-SN-782544	c14	N71-27325
US-PATENT-APPL-SN-766170	c07	N71-24625	US-PATENT-APPL-SN-782693	c33	N77-21320
US-PATENT-APPL-SN-766244	c15	N71-26721	US-PATENT-APPL-SN-782955	c07	N71-33108
US-PATENT-APPL-SN-766245	c14	N71-27215	US-PATENT-APPL-SN-782956	c10	N71-25865
US-PATENT-APPL-SN-766697	c09	N71-33519	US-PATENT-APPL-SN-783374	c15	N71-27147
US-PATENT-APPL-SN-766999	c35	N77-19390	US-PATENT-APPL-SN-783375	c07	N71-24621
US-PATENT-APPL-SN-767741	c09	N72-27228	US-PATENT-APPL-SN-783377	c05	N71-28619
US-PATENT-APPL-SN-767911	c09	N77-19077	US-PATENT-APPL-SN-783378	c07	N71-19436
US-PATENT-APPL-SN-767912	c27	N77-17245	US-PATENT-APPL-SN-783379	c15	N71-17653
US-PATENT-APPL-SN-768336	c15	N71-17648	US-PATENT-APPL-SN-784055	c15	N72-11390
US-PATENT-APPL-SN-768470	c09	N71-28421	US-PATENT-APPL-SN-784521	c14	N71-15620
US-PATENT-APPL-SN-768473	c14	N71-17657	US-PATENT-APPL-SN-784544	c15	N72-12408
US-PATENT-APPL-SN-768662	c07	N73-25160	US-PATENT-APPL-SN-785078	c03	N72-27053
US-PATENT-APPL-SN-768794	c37	N77-20441	US-PATENT-APPL-SN-785257	c44	N77-24590
US-PATENT-APPL-SN-768795	c33	N77-17360	US-PATENT-APPL-SN-785279	c05	N77-31131
US-PATENT-APPL-SN-768942	c46	N74-23068	US-PATENT-APPL-SN-785546	c10	N71-25882
US-PATENT-APPL-SN-769148	c52	N77-17701	US-PATENT-APPL-SN-785595	c10	N71-24861
US-PATENT-APPL-SN-769149	c33	N77-19319	US-PATENT-APPL-SN-785611	c15	N71-24600
US-PATENT-APPL-SN-769592	c15	N72-16330	US-PATENT-APPL-SN-785613	c05	N72-25119
US-PATENT-APPL-SN-769665	c15	N72-11387	US-PATENT-APPL-SN-785615	c05	N72-20098
US-PATENT-APPL-SN-769788	c07	N71-11300	US-PATENT-APPL-SN-785620	c21	N71-27324
US-PATENT-APPL-SN-770203	c05	N71-11195	US-PATENT-APPL-SN-785710	c05	N71-24730
US-PATENT-APPL-SN-770209	c08	N71-27057	US-PATENT-APPL-SN-785780	c18	N71-28729
US-PATENT-APPL-SN-770371	c15	N71-24599	US-PATENT-APPL-SN-786322	c32	N77-22314
US-PATENT-APPL-SN-770398	c06	N71-27254	US-PATENT-APPL-SN-786913	c16	N77-31237
US-PATENT-APPL-SN-770398	c06	N72-27144	US-PATENT-APPL-SN-787393	c23	N71-26206
US-PATENT-APPL-SN-770417	c06	N73-33076	US-PATENT-APPL-SN-787410	c15	N71-19213
US-PATENT-APPL-SN-770425	c06	N72-20121	US-PATENT-APPL-SN-787846	c23	N71-33229
US-PATENT-APPL-SN-771216	c14	N72-17329	US-PATENT-APPL-SN-787906	c03	N71-26084
US-PATENT-APPL-SN-771523	c10	N71-18772	US-PATENT-APPL-SN-787911	c03	N71-28579
US-PATENT-APPL-SN-771530	c09	N72-12136	US-PATENT-APPL-SN-788044	c26	N77-21217
US-PATENT-APPL-SN-771759	c09	N71-29008	US-PATENT-APPL-SN-788045	c34	N77-22423
US-PATENT-APPL-SN-771760	c10	N71-25917	US-PATENT-APPL-SN-788704	c36	N77-21424
US-PATENT-APPL-SN-771803	c07	N71-12391	US-PATENT-APPL-SN-788705	c35	N77-22452
US-PATENT-APPL-SN-771937	c10	N71-24862	US-PATENT-APPL-SN-788856	c37	N77-25535
US-PATENT-APPL-SN-772006	c17	N71-33408	US-PATENT-APPL-SN-789043	c10	N71-26531
US-PATENT-APPL-SN-772165	c14	N77-18179	US-PATENT-APPL-SN-789044	c14	N72-20381
US-PATENT-APPL-SN-772167	c25	N77-18238	US-PATENT-APPL-SN-789045	c15	N72-22089
US-PATENT-APPL-SN-772168	c37	N77-19459	US-PATENT-APPL-SN-789278	c15	N71-24694
			US-PATENT-APPL-SN-789760	c36	N77-24469

NUMBER INDEX

US-PATENT-APEL-SN-789903	.....	c07	N71-28429	US-PATENT-APPL-SN-810576	.....	c15	N73-12492
US-PATENT-APEL-SN-790420	.....	c09	N71-28595	US-PATENT-APPL-SN-810579	.....	c09	N72-22203
US-PATENT-APEL-SN-790637	.....	c44	N77-22615	US-PATENT-APPL-SN-810579	.....	c33	N74-22864
US-PATENT-APEL-SN-791267	.....	c23	N72-17747	US-PATENT-APPL-SN-810815	.....	c06	N72-22107
US-PATENT-APEL-SN-791268	.....	c33	N72-17947	US-PATENT-APPL-SN-811037	.....	c14	N71-26137
US-PATENT-APEL-SN-791288	.....	c28	N71-25213	US-PATENT-APPL-SN-811038	.....	c14	N72-20380
US-PATENT-APEL-SN-791364	.....	c14	N72-17328	US-PATENT-APPL-SN-811401	.....	c49	N77-27432
US-PATENT-APEL-SN-791693	.....	c05	N71-11203	US-PATENT-APPL-SN-811509	.....	c02	N70-33332
US-PATENT-APEL-SN-791888	.....	c23	N71-24725	US-PATENT-APPL-SN-811542	.....	c21	N71-24948
US-PATENT-APEL-SN-792067	.....	c24	N77-22179	US-PATENT-APPL-SN-811815	.....	c44	N77-28584
US-PATENT-APPL-SN-792068	.....	c51	N77-24755	US-PATENT-APPL-SN-811892	.....	c14	N71-27090
US-PATENT-APEL-SN-792069	.....	c37	N77-24496	US-PATENT-APPL-SN-812998	.....	c28	N72-22769
US-PATENT-APEL-SN-792623	.....	c14	N72-23457	US-PATENT-APPL-SN-812999	.....	c05	N71-12345
US-PATENT-APPL-SN-793657	.....	c17	N72-28536	US-PATENT-APPL-SN-813338	.....	c18	N72-22566
US-PATENT-APEL-SN-793670	.....	c37	N77-25536	US-PATENT-APPL-SN-813488	.....	c15	N71-28467
US-PATENT-APEL-SN-793770	.....	c25	N71-15562	US-PATENT-APPL-SN-813494	.....	c08	N72-11171
US-PATENT-APEL-SN-793771	.....	c14	N72-22440	US-PATENT-APPL-SN-814004	.....	c33	N77-28394
US-PATENT-APEL-SN-793772	.....	c10	N71-18722	US-PATENT-APPL-SN-814005	.....	c33	N77-27308
US-PATENT-APEL-SN-793823	.....	c09	N71-33109	US-PATENT-APPL-SN-814006	.....	c37	N77-27404
US-PATENT-APEL-SN-794530	.....	c15	N72-11386	US-PATENT-APPL-SN-814212	.....	c14	N72-17426
US-PATENT-APEL-SN-794968	.....	c15	N71-27146	US-PATENT-APPL-SN-814378	.....	c25	N77-29252
US-PATENT-APEL-SN-795182	.....	c07	N71-24840	US-PATENT-APPL-SN-814813	.....	c32	N77-28358
US-PATENT-APEL-SN-795217	.....	c33	N71-25351	US-PATENT-APPL-SN-815366	.....	c14	N71-28994
US-PATENT-APEL-SN-796256	.....	c52	N77-23743	US-PATENT-APPL-SN-815367	.....	c14	N71-28863
US-PATENT-APEL-SN-796257	.....	c27	N77-23267	US-PATENT-APPL-SN-815760	.....	c15	N71-27068
US-PATENT-APEL-SN-796258	.....	c52	N77-26796	US-PATENT-APPL-SN-816733	.....	c15	N71-27084
US-PATENT-APEL-SN-796263	.....	c23	N77-32244	US-PATENT-APPL-SN-816988	.....	c14	N71-26199
US-PATENT-APEL-SN-796358	.....	c05	N72-11085	US-PATENT-APPL-SN-817413	.....	c33	N77-29403
US-PATENT-APEL-SN-796360	.....	c15	N71-24696	US-PATENT-APPL-SN-817415	.....	c35	N77-29471
US-PATENT-APEL-SN-796370	.....	c10	N71-27366	US-PATENT-APPL-SN-817481	.....	c09	N72-11225
US-PATENT-APEL-SN-796405	.....	c14	N71-27185	US-PATENT-APPL-SN-817482	.....	c10	N71-27338
US-PATENT-APEL-SN-796685	.....	c26	N72-28762	US-PATENT-APPL-SN-817569	.....	c06	N69-31244
US-PATENT-APEL-SN-796690	.....	c07	N72-21119	US-PATENT-APPL-SN-818349	.....	c21	N71-19212
US-PATENT-APEL-SN-796691	.....	c10	N71-26334	US-PATENT-APPL-SN-818916	.....	c15	N77-28111
US-PATENT-APEL-SN-797056	.....	c15	N71-25975	US-PATENT-APPL-SN-818917	.....	c32	N77-28357
US-PATENT-APEL-SN-797057	.....	c15	N70-22192	US-PATENT-APPL-SN-819029	.....	c20	N77-28219
US-PATENT-APEL-SN-797058	.....	c05	N71-24738	US-PATENT-APPL-SN-819599	.....	c15	N71-19214
US-PATENT-APEL-SN-797059	.....	c15	N71-28465	US-PATENT-APPL-SN-819898	.....	c30	N72-17873
US-PATENT-APPL-SN-797210	.....	c28	N77-25346	US-PATENT-APPL-SN-820453	.....	c03	N72-24037
US-PATENT-APEL-SN-797217	.....	c24	N77-24200	US-PATENT-APPL-SN-820498	.....	c74	N77-28937
US-PATENT-APEL-SN-797219	.....	c03	N71-33409	US-PATENT-APPL-SN-820499	.....	c76	N77-30984
US-PATENT-APEL-SN-797794	.....	c07	N71-12396	US-PATENT-APPL-SN-820963	.....	c07	N71-19854
US-PATENT-APEL-SN-797795	.....	c07	N71-27191	US-PATENT-APPL-SN-820964	.....	c15	N71-28740
US-PATENT-APEL-SN-797796	.....	c28	N71-14058	US-PATENT-APPL-SN-820965	.....	c09	N71-13486
US-PATENT-APEL-SN-798277	.....	c23	N71-26654	US-PATENT-APPL-SN-821586	.....	c26	N71-14354
US-PATENT-APEL-SN-798976	.....	c52	N77-27694	US-PATENT-APPL-SN-821681	.....	c43	N77-28563
US-PATENT-APEL-SN-799013	.....	c09	N71-28468	US-PATENT-APPL-SN-822039	.....	c06	N72-25149
US-PATENT-APPL-SN-799023	.....	c37	N77-24497	US-PATENT-APPL-SN-822088	.....	c15	N71-27135
US-PATENT-APEL-SN-799024	.....	c24	N77-26242	US-PATENT-APPL-SN-822089	.....	c23	N72-23695
US-PATENT-APEL-SN-799025	.....	c32	N77-24339	US-PATENT-APPL-SN-822090	.....	c16	N71-27183
US-PATENT-APEL-SN-799026	.....	c44	N77-24589	US-PATENT-APPL-SN-822518	.....	c09	N71-13522
US-PATENT-APEL-SN-799353	.....	c09	N71-27232	US-PATENT-APPL-SN-822519	.....	c14	N71-28992
US-PATENT-APEL-SN-799832	.....	c54	N77-24771	US-PATENT-APPL-SN-822534	.....	c09	N72-11224
US-PATENT-APEL-SN-800204	.....	c06	N72-17094	US-PATENT-APPL-SN-823061	.....	c44	N77-30613
US-PATENT-APPL-SN-800973	.....	c16	N71-24832	US-PATENT-APPL-SN-823566	.....	c74	N77-30935
US-PATENT-APEL-SN-801290	.....	c37	N77-24498	US-PATENT-APPL-SN-824024	.....	c44	N77-30616
US-PATENT-APEL-SN-801312	.....	c16	N71-15565	US-PATENT-APPL-SN-824042	.....	c23	N71-29123
US-PATENT-APEL-SN-801336	.....	c02	N71-13422	US-PATENT-APPL-SN-824755	.....	c09	N70-33182
US-PATENT-APEL-SN-801432	.....	c33	N77-24385	US-PATENT-APPL-SN-825253	.....	c16	N69-31343
US-PATENT-APEL-SN-801452	.....	c44	N77-28583	US-PATENT-APPL-SN-825258	.....	c26	N72-21701
US-PATENT-APEL-SN-801660	.....	c14	N71-26672	US-PATENT-APPL-SN-825259	.....	c14	N71-26788
US-PATENT-APEL-SN-802812	.....	c10	N72-22235	US-PATENT-APPL-SN-826202	.....	c54	N77-30751
US-PATENT-APEL-SN-802813	.....	c15	N72-22487	US-PATENT-APPL-SN-826203	.....	c45	N77-31668
US-PATENT-APEL-SN-802816	.....	c31	N71-16346	US-PATENT-APPL-SN-826204	.....	c37	N77-31501
US-PATENT-APEL-SN-802818	.....	c07	N71-29065	US-PATENT-APPL-SN-827579	.....	c15	N71-24984
US-PATENT-APPL-SN-802820	.....	c10	N71-13545	US-PATENT-APPL-SN-827597	.....	c26	N69-33482
US-PATENT-APPL-SN-802948	.....	c31	N71-33160	US-PATENT-APPL-SN-828909	.....	c28	N71-27094
US-PATENT-APEL-SN-802972	.....	c09	N71-26678	US-PATENT-APPL-SN-828920	.....	c35	N74-22095
US-PATENT-APPL-SN-803822	.....	c26	N77-24254	US-PATENT-APPL-SN-828921	.....	c09	N71-27001
US-PATENT-APEL-SN-803823	.....	c44	N77-24593	US-PATENT-APPL-SN-828983	.....	c03	N71-24719
US-PATENT-APEL-SN-804035	.....	c33	N77-28395	US-PATENT-APPL-SN-828984	.....	c08	N71-29033
US-PATENT-APEL-SN-804172	.....	c28	N71-26781	US-PATENT-APPL-SN-829314	.....	c54	N77-31787
US-PATENT-APEL-SN-805298	.....	c10	N71-25899	US-PATENT-APPL-SN-829315	.....	c34	N77-32434
US-PATENT-APEL-SN-805405	.....	c14	N71-27323	US-PATENT-APPL-SN-829316	.....	c12	N77-31213
US-PATENT-APEL-SN-805406	.....	c07	N71-24613	US-PATENT-APPL-SN-829317	.....	c52	N77-30737
US-PATENT-APEL-SN-806149	.....	c27	N71-16223	US-PATENT-APPL-SN-829318	.....	c52	N77-30736
US-PATENT-APEL-SN-806226	.....	c14	N71-27407	US-PATENT-APPL-SN-829319	.....	c34	N77-32435
US-PATENT-APEL-SN-806440	.....	c52	N77-27693	US-PATENT-APPL-SN-829321	.....	c33	N77-31407
US-PATENT-APEL-SN-807762	.....	c27	N77-26308	US-PATENT-APPL-SN-829390	.....	c44	N77-31610
US-PATENT-APEL-SN-808192	.....	c15	N71-27432	US-PATENT-APPL-SN-829825	.....	c03	N71-24681
US-PATENT-APPL-SN-808193	.....	c31	N71-26537	US-PATENT-APPL-SN-830272	.....	c60	N77-31800
US-PATENT-APEL-SN-808462	.....	c10	N71-27136	US-PATENT-APPL-SN-830366	.....	c16	N72-13437
US-PATENT-APEL-SN-808510	.....	c32	N77-27272	US-PATENT-APPL-SN-830382	.....	c44	N77-31611
US-PATENT-APPL-SN-808576	.....	c15	N71-27754	US-PATENT-APPL-SN-830715	.....	c15	N71-24903
US-PATENT-APEL-SN-808577	.....	c32	N71-25360	US-PATENT-APPL-SN-830978	.....	c28	N71-26173
US-PATENT-APPL-SN-808822	.....	c14	N73-16483	US-PATENT-APPL-SN-831118	.....	c08	N72-11172
US-PATENT-APEL-SN-809822	.....	c28	N71-27585	US-PATENT-APPL-SN-831631	.....	c43	N77-31583
US-PATENT-APEL-SN-809890	.....	c44	N77-28585	US-PATENT-APPL-SN-831632	.....	c25	N77-31260
US-PATENT-APPL-SN-810575	.....	c15	N71-27169	US-PATENT-APPL-SN-831633	.....	c05	N77-31130

NUMBER INDEX

US-PATENT-APPL-SN-831634	.....	c05 N77-31135	US-PATENT-APPL-SN-856328	.....	c14 N72-22441
US-PATENT-APPL-SN-832603	.....	c09 N72-22199	US-PATENT-APPL-SN-856415	.....	c09 N71-26182
US-PATENT-APPL-SN-833049	.....	c06 N72-21094	US-PATENT-APPL-SN-857241	.....	c46 N74-23069
US-PATENT-APPL-SN-833636	.....	c27 N77-32313	US-PATENT-APPL-SN-857445	.....	c05 N71-24728
US-PATENT-APPL-SN-833637	.....	c33 N77-32402	US-PATENT-APPL-SN-857967	.....	c15 N72-20483
US-PATENT-APPL-SN-835058	.....	c21 N72-22619	US-PATENT-APPL-SN-858695	.....	c11 N72-22247
US-PATENT-APPL-SN-835059	.....	c09 N71-26133	US-PATENT-APPL-SN-860492	.....	c09 N72-20199
US-PATENT-APPL-SN-835060	.....	c02 N71-26110	US-PATENT-APPL-SN-860493	.....	c14 N72-16283
US-PATENT-APPL-SN-835146	.....	c15 N70-33264	US-PATENT-APPL-SN-860635	.....	c28 N72-17843
US-PATENT-APPL-SN-835152	.....	c28 N70-38199	US-PATENT-APPL-SN-860750	.....	c08 N72-22165
US-PATENT-APPL-SN-835153	.....	c31 N71-17680	US-PATENT-APPL-SN-860751	.....	c08 N72-18184
US-PATENT-APPL-SN-836280	.....	c14 N73-14428	US-PATENT-APPL-SN-860781	.....	c18 N72-22567
US-PATENT-APPL-SN-836280	.....	c35 N75-25122	US-PATENT-APPL-SN-861152	.....	c14 N70-33322
US-PATENT-APPL-SN-836367	.....	c09 N71-24804	US-PATENT-APPL-SN-861649	.....	c14 N72-17327
US-PATENT-APPL-SN-837259	.....	c54 N77-32723	US-PATENT-APPL-SN-862921	.....	c31 N71-29050
US-PATENT-APPL-SN-837377	.....	c15 N71-26148	US-PATENT-APPL-SN-863276	.....	c16 N72-12440
US-PATENT-APPL-SN-837378	.....	c15 N71-24865	US-PATENT-APPL-SN-863280	.....	c24 N72-33681
US-PATENT-APPL-SN-837796	.....	c35 N77-32461	US-PATENT-APPL-SN-863913	.....	c14 N71-28939
US-PATENT-APPL-SN-837825	.....	c15 N71-27006	US-PATENT-APPL-SN-863914	.....	c09 N72-31235
US-PATENT-APPL-SN-837830	.....	c02 N71-27088	US-PATENT-APPL-SN-863963	.....	c10 N71-26085
US-PATENT-APPL-SN-838278	.....	c60 N74-20836	US-PATENT-APPL-SN-863967	.....	c11 N71-27036
US-PATENT-APPL-SN-838630	.....	c14 N71-28993	US-PATENT-APPL-SN-864020	.....	c15 N72-17454
US-PATENT-APPL-SN-839934	.....	c07 N72-20140	US-PATENT-APPL-SN-864039	.....	c15 N72-22483
US-PATENT-APPL-SN-839935	.....	c15 N71-24895	US-PATENT-APPL-SN-864097	.....	c07 N71-33606
US-PATENT-APPL-SN-839941	.....	c07 N71-26181	US-PATENT-APPL-SN-864710	.....	c03 N70-26871
US-PATENT-APPL-SN-839994	.....	c28 N71-28915	US-PATENT-APPL-SN-865106	.....	c09 N72-22202
US-PATENT-APPL-SN-840176	.....	c28 N71-27095	US-PATENT-APPL-SN-865109	.....	c14 N71-28933
US-PATENT-APPL-SN-840308	.....	c07 N71-33613	US-PATENT-APPL-SN-865274	.....	c09 N72-17155
US-PATENT-APPL-SN-840359	.....	c23 N71-29125	US-PATENT-APPL-SN-865298	.....	c15 N72-11388
US-PATENT-APPL-SN-840870	.....	c15 N71-26189	US-PATENT-APPL-SN-865329	.....	c15 N71-29132
US-PATENT-APPL-SN-840983	.....	c05 N70-33285	US-PATENT-APPL-SN-865811	.....	c09 N71-27053
US-PATENT-APPL-SN-841278	.....	c33 N77-21316	US-PATENT-APPL-SN-865909	.....	c14 N72-11364
US-PATENT-APPL-SN-841845	.....	c14 N73-22317	US-PATENT-APPL-SN-866442	.....	c25 N72-24753
US-PATENT-APPL-SN-842170	.....	c11 N70-33278	US-PATENT-APPL-SN-867841	.....	c11 N72-22246
US-PATENT-APPL-SN-842171	.....	c11 N70-33329	US-PATENT-APPL-SN-867842	.....	c23 N72-27728
US-PATENT-APPL-SN-843022	.....	c11 N70-33287	US-PATENT-APPL-SN-867843	.....	c14 N71-26161
US-PATENT-APPL-SN-843032	.....	c28 N70-41818	US-PATENT-APPL-SN-867851	.....	c15 N72-22484
US-PATENT-APPL-SN-843251	.....	c03 N72-11062	US-PATENT-APPL-SN-868445	.....	c14 N72-17323
US-PATENT-APPL-SN-844225	.....	c05 N72-25120	US-PATENT-APPL-SN-868529	.....	c08 N72-22167
US-PATENT-APPL-SN-844243	.....	c37 N75-29426	US-PATENT-APPL-SN-868530	.....	c05 N72-11084
US-PATENT-APPL-SN-844315	.....	c35 N77-21392	US-PATENT-APPL-SN-868775	.....	c09 N72-25261
US-PATENT-APPL-SN-844355	.....	c03 N72-26031	US-PATENT-APPL-SN-868775	.....	c09 N73-27150
US-PATENT-APPL-SN-845365	.....	c09 N71-13518	US-PATENT-APPL-SN-869260	.....	c05 N72-20097
US-PATENT-APPL-SN-845584	.....	c27 N73-22710	US-PATENT-APPL-SN-869260	.....	c05 N73-25125
US-PATENT-APPL-SN-845807	.....	c15 N72-11391	US-PATENT-APPL-SN-870689	.....	c06 N72-25148
US-PATENT-APPL-SN-845971	.....	c11 N71-28629	US-PATENT-APPL-SN-872602	.....	c09 N72-22200
US-PATENT-APPL-SN-845972	.....	c09 N70-11148	US-PATENT-APPL-SN-872664	.....	c08 N70-34675
US-PATENT-APPL-SN-845973	.....	c11 N71-24985	US-PATENT-APPL-SN-873045	.....	c14 N72-220379
US-PATENT-APPL-SN-845974	.....	c33 N71-25353	US-PATENT-APPL-SN-873259	.....	c08 N72-21200
US-PATENT-APPL-SN-845990	.....	c14 N71-27005	US-PATENT-APPL-SN-873260	.....	c33 N72-17988
US-PATENT-APPL-SN-845991	.....	c14 N71-29134	US-PATENT-APPL-SN-873793	.....	c14 N72-21407
US-PATENT-APPL-SN-847023	.....	c31 N70-37938	US-PATENT-APPL-SN-874177	.....	c11 N72-25284
US-PATENT-APPL-SN-847027	.....	c03 N70-33343	US-PATENT-APPL-SN-874435	.....	c11 N71-33612
US-PATENT-APPL-SN-847596	.....	c15 N70-10867	US-PATENT-APPL-SN-874732	.....	c09 N71-29139
US-PATENT-APPL-SN-847815	.....	c52 N75-15270	US-PATENT-APPL-SN-874733	.....	c15 N71-26635
US-PATENT-APPL-SN-848282	.....	c15 N72-21462	US-PATENT-APPL-SN-874958	.....	c31 N71-15566
US-PATENT-APPL-SN-848325	.....	c06 N70-11251	US-PATENT-APPL-SN-875849	.....	c07 N71-33696
US-PATENT-APPL-SN-848351	.....	c06 N70-11252	US-PATENT-APPL-SN-876588	.....	c15 N72-25452
US-PATENT-APPL-SN-848403	.....	c33 N74-20859	US-PATENT-APPL-SN-876588	.....	c25 N74-30502
US-PATENT-APPL-SN-848403	.....	c36 N75-27364	US-PATENT-APPL-SN-877717	.....	c14 N72-27410
US-PATENT-APPL-SN-848481	.....	c17 N70-33283	US-PATENT-APPL-SN-877717	.....	c14 N73-13417
US-PATENT-APPL-SN-848776	.....	c07 N72-22127	US-PATENT-APPL-SN-877990	.....	c14 N72-28243
US-PATENT-APPL-SN-848805	.....	c06 N72-17095	US-PATENT-APPL-SN-878730	.....	c08 N72-22164
US-PATENT-APPL-SN-848810	.....	c07 N72-11148	US-PATENT-APPL-SN-878731	.....	c15 N71-26162
US-PATENT-APPL-SN-848811	.....	c10 N71-26142	US-PATENT-APPL-SN-880246	.....	c28 N72-22770
US-PATENT-APPL-SN-849106	.....	c09 N72-22197	US-PATENT-APPL-SN-880247	.....	c09 N70-20737
US-PATENT-APPL-SN-850586	.....	c31 N71-25434	US-PATENT-APPL-SN-880248	.....	c07 N72-11150
US-PATENT-APPL-SN-850587	.....	c08 N72-21199	US-PATENT-APPL-SN-880249	.....	c15 N72-22482
US-PATENT-APPL-SN-851298	.....	c15 N72-12409	US-PATENT-APPL-SN-880250	.....	c03 N72-22032
US-PATENT-APPL-SN-851394	.....	c09 N71-24892	US-PATENT-APPL-SN-880271	.....	c15 N72-25448
US-PATENT-APPL-SN-852131	.....	c15 N71-24836	US-PATENT-APPL-SN-880272	.....	c14 N71-27058
US-PATENT-APPL-SN-852843	.....	c09 N72-22195	US-PATENT-APPL-SN-880398	.....	c15 N73-12487
US-PATENT-APPL-SN-853641	.....	c33 N72-25913	US-PATENT-APPL-SN-880831	.....	c11 N72-20244
US-PATENT-APPL-SN-853716	.....	c09 N71-24904	US-PATENT-APPL-SN-880885	.....	c07 N72-12080
US-PATENT-APPL-SN-853746	.....	c02 N72-11018	US-PATENT-APPL-SN-881039	.....	c09 N71-24842
US-PATENT-APPL-SN-853763	.....	c07 N70-12616	US-PATENT-APPL-SN-881041	.....	c09 N72-22204
US-PATENT-APPL-SN-853763	.....	c07 N72-33146	US-PATENT-APPL-SN-882122	.....	c14 N72-22438
US-PATENT-APPL-SN-853765	.....	c17 N72-22530	US-PATENT-APPL-SN-882577	.....	c07 N71-27056
US-PATENT-APPL-SN-853855	.....	c17 N72-28535	US-PATENT-APPL-SN-883523	.....	c09 N72-33204
US-PATENT-APPL-SN-853856	.....	c16 N71-29131	US-PATENT-APPL-SN-883524	.....	c09 N72-21246
US-PATENT-APPL-SN-853983	.....	c14 N70-33254	US-PATENT-APPL-SN-885521	.....	c03 N72-28025
US-PATENT-APPL-SN-853984	.....	c21 N70-33181	US-PATENT-APPL-SN-885571	.....	c09 N71-28886
US-PATENT-APPL-SN-854815	.....	c09 N71-24807	US-PATENT-APPL-SN-885594	.....	c15 N71-29133
US-PATENT-APPL-SN-855004	.....	c24 N72-11595	US-PATENT-APPL-SN-886907	.....	c37 N77-22478
US-PATENT-APPL-SN-856253	.....	c24 N74-19769	US-PATENT-APPL-SN-887685	.....	c10 N72-20223
US-PATENT-APPL-SN-856258	.....	c05 N71-17599	US-PATENT-APPL-SN-887698	.....	c09 N72-17153
US-PATENT-APPL-SN-856279	.....	c07 N72-21118	US-PATENT-APPL-SN-887699	.....	c15 N72-17452
US-PATENT-APPL-SN-856282	.....	c08 N72-22166	US-PATENT-APPL-SN-887700	.....	c07 N71-28980
US-PATENT-APPL-SN-856327	.....	c05 N72-16015	US-PATENT-APPL-SN-887701	.....	c08 N71-29034

NUMBER INDEX

US-PATENT-APFI-SN-889374	c08	N72-25207	US-PATENT-CLASS-18-39	c27	N70-34783
US-PATENT-APFI-SN-889375	c10	N72-20222	US-PATENT-CLASS-19-205	c37	N76-18456
US-PATENT-APFI-SN-889376	c18	N71-26285	US-PATENT-CLASS-21-207	c17	N71-16393
US-PATENT-APFI-SN-889387	c09	N71-29035	US-PATENT-CLASS-22-200	c15	N71-15966
US-PATENT-APFI-SN-889420	c14	N72-25413	US-PATENT-CLASS-22-203	c17	N70-38198
US-PATENT-APFI-SN-889422	c09	N72-25259	US-PATENT-CLASS-23-55	c06	N72-17093
US-PATENT-APFI-SN-889433	c10	N72-22236	US-PATENT-CLASS-23-88	c06	N72-17093
US-PATENT-APFI-SN-889437	c15	N72-11392	US-PATENT-CLASS-23-97	c06	N72-17093
US-PATENT-APFI-SN-889438	c15	N72-18477	US-PATENT-CLASS-23-109	c04	N72-33072
US-PATENT-APFI-SN-889478	c08	N71-25138	US-PATENT-CLASS-23-201	c06	N72-17095
US-PATENT-APFI-SN-889479	c14	N72-17325	US-PATENT-CLASS-23-208	c15	N69-21922
US-PATENT-APFI-SN-889551	c21	N72-21624	US-PATENT-CLASS-23-208	c26	N70-36805
US-PATENT-APFI-SN-889554	c15	N72-20444	US-PATENT-CLASS-23-209.1	c15	N72-20446
US-PATENT-APFI-SN-889555	c09	N72-17154	US-PATENT-CLASS-23-230	c06	N71-23527
US-PATENT-APFI-SN-889556	c14	N72-18411	US-PATENT-CLASS-23-230	c06	N72-17095
US-PATENT-APFI-SN-889557	c11	N72-17183	US-PATENT-CLASS-23-230B	c25	N75-14844
US-PATENT-APFI-SN-889558	c15	N72-22491	US-PATENT-CLASS-23-230B	c23	N77-17161
US-PATENT-APFI-SN-889563	c15	N72-21464	US-PATENT-CLASS-23-230L	c35	N74-32879
US-PATENT-APFI-SN-889584	c08	N72-31226	US-PATENT-CLASS-23-230M	c25	N76-18245
US-PATENT-APFI-SN-889662	c15	N72-25447	US-PATENT-CLASS-23-230M	c23	N77-17161
			US-PATENT-CLASS-23-230R	c06	N72-17094
			US-PATENT-CLASS-23-230R	c17	N73-12547
			US-PATENT-CLASS-23-230R	c17	N73-27446
US-PATENT-CLASS-D12-76	c05	N75-25914	US-PATENT-CLASS-23-230R	c25	N76-18245
US-PATENT-CLASS-D71-1	c05	N74-10907	US-PATENT-CLASS-23-230R	c45	N76-31714
			US-PATENT-CLASS-23-230R	c23	N77-17161
US-PATENT-CLASS-1	c14	N71-27005	US-PATENT-CLASS-23-231	c23	N77-17161
US-PATENT-CLASS-2-2.1	c05	N71-11194	US-PATENT-CLASS-23-232C	c06	N72-17094
US-PATENT-CLASS-2-2.1	c05	N71-11195	US-PATENT-CLASS-23-232C	c06	N76-18245
US-PATENT-CLASS-2-2.1	c05	N71-12335	US-PATENT-CLASS-23-232C	c23	N77-17161
US-PATENT-CLASS-2-2.1	c05	N71-12344	US-PATENT-CLASS-23-232E	c06	N73-16106
US-PATENT-CLASS-2-2.1	c05	N71-23161	US-PATENT-CLASS-23-232E	c45	N76-31714
US-PATENT-CLASS-2-2.1	c05	N71-24623	US-PATENT-CLASS-23-232R	c06	N73-16106
US-PATENT-CLASS-2-2.1	c05	N71-24730	US-PATENT-CLASS-23-232R	c45	N76-31714
US-PATENT-CLASS-2-2.1	c05	N72-20096	US-PATENT-CLASS-23-232R	c23	N77-17161
US-PATENT-CLASS-2-2.1	c05	N72-20098	US-PATENT-CLASS-23-252R	c25	N74-12813
US-PATENT-CLASS-2-2.1	c05	N72-25119	US-PATENT-CLASS-23-253	c23	N71-16355
US-PATENT-CLASS-2-2.1	c05	N73-26071	US-PATENT-CLASS-23-253	c06	N71-26754
US-PATENT-CLASS-2-2.1A	c05	N72-22092	US-PATENT-CLASS-23-253	c06	N72-17095
US-PATENT-CLASS-2-2.1A	c05	N73-25125	US-PATENT-CLASS-23-253A	c51	N77-27677
US-PATENT-CLASS-2-2.1A	c05	N73-32012	US-PATENT-CLASS-23-253PC	c06	N72-17094
US-PATENT-CLASS-2-2.1A	c54	N74-32546	US-PATENT-CLASS-23-253PC	c37	N74-18123
US-PATENT-CLASS-2-2.1A	c54	N77-32721	US-PATENT-CLASS-23-253R	c15	N72-21465
US-PATENT-CLASS-2-6	c05	N71-26333	US-PATENT-CLASS-23-253R	c25	N75-14844
US-PATENT-CLASS-2-14	c05	N71-23096	US-PATENT-CLASS-23-253J	c25	N76-18245
US-PATENT-CLASS-2-81	c18	N71-26285	US-PATENT-CLASS-23-254	c14	N71-20442
US-PATENT-CLASS-2-81	c05	N73-32012	US-PATENT-CLASS-23-254E	c06	N73-16106
US-PATENT-CLASS-2-82	c54	N74-32546	US-PATENT-CLASS-23-254E	c33	N75-26245
US-PATENT-CLASS-2-115	c05	N72-25119	US-PATENT-CLASS-23-254E	c35	N75-29380
US-PATENT-CLASS-2-275	c18	N71-26285	US-PATENT-CLASS-23-254E	c45	N76-21742
US-PATENT-CLASS-3-1	c52	N77-25772	US-PATENT-CLASS-23-254EF	c35	N76-18403
US-PATENT-CLASS-3-1.1	c05	N73-32013	US-PATENT-CLASS-23-254R	c06	N73-16106
US-PATENT-CLASS-3-1.1	c52	N77-14738	US-PATENT-CLASS-23-254R	c26	N76-18245
US-PATENT-CLASS-3-1.2	c52	N77-14735	US-PATENT-CLASS-23-254R	c23	N77-17161
US-PATENT-CLASS-3-2	c05	N73-32013	US-PATENT-CLASS-23-255E	c35	N75-29380
US-PATENT-CLASS-3-2	c54	N77-30749	US-PATENT-CLASS-23-255R	c25	N76-18245
US-PATENT-CLASS-3-6	c05	N73-32013	US-PATENT-CLASS-23-259	c15	N71-27372
US-PATENT-CLASS-3-12	c05	N73-32013	US-PATENT-CLASS-23-259	c15	N72-21465
US-PATENT-CLASS-3-14	c52	N77-14735	US-PATENT-CLASS-23-259	c37	N74-18123
US-PATENT-CLASS-3-21	c54	N77-30749	US-PATENT-CLASS-23-259	c51	N77-27677
US-PATENT-CLASS-4-10	c54	N74-20725	US-PATENT-CLASS-23-277	c26	N70-40015
US-PATENT-CLASS-4-99	c05	N72-22093	US-PATENT-CLASS-23-277C	c25	N74-33378
US-PATENT-CLASS-4-110	c05	N72-22093	US-PATENT-CLASS-23-277R	c44	N77-22607
US-PATENT-CLASS-4-120	c54	N74-20725	US-PATENT-CLASS-23-281	c28	N72-18766
US-PATENT-CLASS-5-69	c05	N72-11085	US-PATENT-CLASS-23-281	c25	N74-12813
US-PATENT-CLASS-5-82	c05	N71-23159	US-PATENT-CLASS-23-281	c44	N76-18642
US-PATENT-CLASS-5-345	c05	N70-33285	US-PATENT-CLASS-23-281	c44	N76-29700
US-PATENT-CLASS-8-3	c51	N77-27677	US-PATENT-CLASS-23-281	c44	N77-10636
US-PATENT-CLASS-8-94.11	c51	N77-27677	US-PATENT-CLASS-23-281	c44	N77-22607
US-PATENT-CLASS-8-94.12	c18	N71-15545	US-PATENT-CLASS-23-284	c35	N74-15127
US-PATENT-CLASS-9-2A	c02	N73-26006	US-PATENT-CLASS-23-288	c28	N72-18766
US-PATENT-CLASS-9-3	c02	N73-26006	US-PATENT-CLASS-23-288F	c25	N74-12813
US-PATENT-CLASS-9-8	c03	N70-36778	US-PATENT-CLASS-23-288J	c25	N74-12813
US-PATENT-CLASS-9-9	c15	N71-24600	US-PATENT-CLASS-23-292	c51	N77-27677
US-PATENT-CLASS-9-11A	c02	N73-26006	US-PATENT-CLASS-24-126	c15	N71-22994
US-PATENT-CLASS-9-11A	c54	N74-14845	US-PATENT-CLASS-24-134R	c15	N73-25512
US-PATENT-CLASS-9-312	c05	N71-22748	US-PATENT-CLASS-24-205.17	c15	N71-25975
US-PATENT-CLASS-9-316	c05	N70-36493	US-PATENT-CLASS-24-211	c15	N71-17653
US-PATENT-CLASS-13-20	c11	N72-23215	US-PATENT-CLASS-24-211N	c15	N72-11385
US-PATENT-CLASS-13-26	c33	N71-15625	US-PATENT-CLASS-24-263	c15	N71-21076
US-PATENT-CLASS-13-26	c14	N71-23267	US-PATENT-CLASS-24-263	c15	N71-26262
US-PATENT-CLASS-13-31	c11	N72-23215	US-PATENT-CLASS-25-156	c15	N71-16076
US-PATENT-CLASS-13-31	c31	N74-27900	US-PATENT-CLASS-27-498	c15	N73-28515
US-PATENT-CLASS-13-35	c33	N71-24145	US-PATENT-CLASS-29-DIG.24	c24	N75-33181
US-PATENT-CLASS-15-143	c15	N72-11390	US-PATENT-CLASS-29-DIG.35	c37	N77-23482
US-PATENT-CLASS-15-210	c15	N72-11390	US-PATENT-CLASS-29-DIG.39	c24	N75-33181
US-PATENT-CLASS-15-415	c14	N73-30395	US-PATENT-CLASS-29-25.14	c05	N72-25121
US-PATENT-CLASS-18-6	c15	N71-26721	US-PATENT-CLASS-29-25.18	c09	N71-26678
US-PATENT-CLASS-18-26	c06	N71-22975	US-PATENT-CLASS-29-25.18	c05	N72-25121

NUMBER INDEX

US-PATENT-CLASS-29-25.18	c20	N75-18310	US-PATENT-CLASS-29-497	c09	N72-25261
US-PATENT-CLASS-29-25.18	c20	N76-21276	US-PATENT-CLASS-29-497	c15	N73-32358
US-PATENT-CLASS-29-25.42	c26	N72-28762	US-PATENT-CLASS-29-497	c37	N74-18128
US-PATENT-CLASS-29-26A	c37	N75-33395	US-PATENT-CLASS-29-497.5	c15	N73-28515
US-PATENT-CLASS-29-81D	c37	N76-18454	US-PATENT-CLASS-29-497.5	c15	N73-33383
US-PATENT-CLASS-29-148.4	c15	N71-16052	US-PATENT-CLASS-29-497.5	c37	N74-11300
US-PATENT-CLASS-29-148.4	c15	N71-17688	US-PATENT-CLASS-29-497.5	c37	N75-13261
US-PATENT-CLASS-29-148.4A	c37	N74-15128	US-PATENT-CLASS-29-498	c09	N72-25261
US-PATENT-CLASS-29-148.4B	c37	N74-15128	US-PATENT-CLASS-29-498	c15	N73-33383
US-PATENT-CLASS-29-155.55	c15	N71-15986	US-PATENT-CLASS-29-498	c37	N74-11301
US-PATENT-CLASS-29-157	c28	N71-15658	US-PATENT-CLASS-29-498	c37	N74-18128
US-PATENT-CLASS-29-157.3	c28	N70-41818	US-PATENT-CLASS-29-498	c37	N74-21055
US-PATENT-CLASS-29-157.3R	c34	N74-18552	US-PATENT-CLASS-29-502	c09	N72-25261
US-PATENT-CLASS-29-182	c37	N74-13179	US-PATENT-CLASS-29-503	c37	N74-11301
US-PATENT-CLASS-29-182	c34	N76-27515	US-PATENT-CLASS-29-504	c37	N74-21055
US-PATENT-CLASS-29-182.1	c18	N71-23710	US-PATENT-CLASS-29-504	c37	N75-13261
US-PATENT-CLASS-29-182.2	c17	N71-23046	US-PATENT-CLASS-29-517	c15	N71-17650
US-PATENT-CLASS-29-182.2	c37	N75-26371	US-PATENT-CLASS-29-526	c37	N76-19437
US-PATENT-CLASS-29-182.5	c17	N72-28536	US-PATENT-CLASS-29-526	c39	N76-31562
US-PATENT-CLASS-29-182.5	c37	N75-26371	US-PATENT-CLASS-29-527.2	c15	N72-20444
US-PATENT-CLASS-29-182.5	c27	N76-15311	US-PATENT-CLASS-29-527.2	c15	N73-32360
US-PATENT-CLASS-29-182.5	c27	N77-13217	US-PATENT-CLASS-29-527.2	c37	N74-11301
US-PATENT-CLASS-29-183.5	c17	N70-38490	US-PATENT-CLASS-29-527.2	c24	N75-33181
US-PATENT-CLASS-29-193	c34	N76-27515	US-PATENT-CLASS-29-527.2	c24	N77-19171
US-PATENT-CLASS-29-194	c26	N75-19408	US-PATENT-CLASS-29-570	c26	N72-28761
US-PATENT-CLASS-29-194	c44	N76-14595	US-PATENT-CLASS-29-571	c35	N75-13213
US-PATENT-CLASS-29-195	c44	N76-14595	US-PATENT-CLASS-29-572	c09	N71-23027
US-PATENT-CLASS-29-195A	c27	N76-16229	US-PATENT-CLASS-29-572	c03	N71-28681
US-PATENT-CLASS-29-195Y	c14	N73-32320	US-PATENT-CLASS-29-572	c03	N72-22041
US-PATENT-CLASS-29-196.2	c17	N73-32414	US-PATENT-CLASS-29-572	c44	N74-14784
US-PATENT-CLASS-29-196.2	c26	N75-19408	US-PATENT-CLASS-29-572	c44	N76-14600
US-PATENT-CLASS-29-196.6	c17	N73-32414	US-PATENT-CLASS-29-572	c44	N76-28635
US-PATENT-CLASS-29-196.6	c37	N75-13261	US-PATENT-CLASS-29-572	c44	N77-10635
US-PATENT-CLASS-29-196.6	c26	N75-19408	US-PATENT-CLASS-29-573	c14	N73-13417
US-PATENT-CLASS-29-197	c17	N73-32414	US-PATENT-CLASS-29-578	c26	N72-17820
US-PATENT-CLASS-29-197	c37	N75-13261	US-PATENT-CLASS-29-580	c09	N73-27150
US-PATENT-CLASS-29-197	c26	N75-19408	US-PATENT-CLASS-29-588	c14	N71-27334
US-PATENT-CLASS-29-197	c44	N76-14595	US-PATENT-CLASS-29-588	c14	N72-31446
US-PATENT-CLASS-29-198	c17	N70-33288	US-PATENT-CLASS-29-588	c44	N74-14784
US-PATENT-CLASS-29-198	c09	N72-25259	US-PATENT-CLASS-29-589	c26	N72-17820
US-PATENT-CLASS-29-203H	c37	N74-32918	US-PATENT-CLASS-29-589	c09	N72-25261
US-PATENT-CLASS-29-203HW	c33	N74-26977	US-PATENT-CLASS-29-589	c15	N73-18469
US-PATENT-CLASS-29-234	c15	N70-36901	US-PATENT-CLASS-29-590	c09	N72-22199
US-PATENT-CLASS-29-268	c37	N74-32918	US-PATENT-CLASS-29-591	c15	N73-18469
US-PATENT-CLASS-29-271	c15	N70-41371	US-PATENT-CLASS-29-592	c35	N75-13213
US-PATENT-CLASS-29-278R	c15	N71-29133	US-PATENT-CLASS-29-597	c33	N77-26385
US-PATENT-CLASS-29-400	c05	N71-12345	US-PATENT-CLASS-29-599	c15	N72-25447
US-PATENT-CLASS-29-412	c15	N72-20444	US-PATENT-CLASS-29-599	c26	N73-26752
US-PATENT-CLASS-29-419	c24	N75-28135	US-PATENT-CLASS-29-599	c26	N73-32571
US-PATENT-CLASS-29-420	c24	N75-13032	US-PATENT-CLASS-29-603	c08	N71-27210
US-PATENT-CLASS-29-420.5	c26	N74-10521	US-PATENT-CLASS-29-604	c24	N75-13032
US-PATENT-CLASS-29-420.5	c37	N74-13179	US-PATENT-CLASS-29-610	c24	N75-30260
US-PATENT-CLASS-29-420.5	c37	N75-26371	US-PATENT-CLASS-29-613	c24	N75-30260
US-PATENT-CLASS-29-421	c15	N71-29018	US-PATENT-CLASS-29-622	c33	N77-26385
US-PATENT-CLASS-29-421	c14	N72-22439	US-PATENT-CLASS-29-624	c15	N72-20444
US-PATENT-CLASS-29-421	c37	N76-14461	US-PATENT-CLASS-29-624	c14	N73-13417
US-PATENT-CLASS-29-423	c15	N70-36409	US-PATENT-CLASS-29-628	c15	N72-22491
US-PATENT-CLASS-29-423	c31	N74-21059	US-PATENT-CLASS-29-628	c09	N72-25261
US-PATENT-CLASS-29-426	c15	N72-20444	US-PATENT-CLASS-29-628	c09	N73-28083
US-PATENT-CLASS-29-428	c15	N71-17688	US-PATENT-CLASS-29-628	c33	N77-26385
US-PATENT-CLASS-29-432	c37	N76-19437	US-PATENT-CLASS-29-629	c09	N73-28083
US-PATENT-CLASS-29-433	c37	N76-19437	US-PATENT-CLASS-29-630	c09	N73-28083
US-PATENT-CLASS-29-447	c37	N77-23482	US-PATENT-CLASS-29-630A	c05	N72-25121
US-PATENT-CLASS-29-452	c15	N73-30457	US-PATENT-CLASS-29-630A	c09	N73-28083
US-PATENT-CLASS-29-460	c37	N74-11301	US-PATENT-CLASS-29-630E	c33	N77-26385
US-PATENT-CLASS-29-460	c37	N75-13261	US-PATENT-CLASS-30-228	c15	N70-42017
US-PATENT-CLASS-29-467	c39	N76-31562	US-PATENT-CLASS-32-28	c05	N73-27062
US-PATENT-CLASS-29-470.1	c37	N74-21057	US-PATENT-CLASS-32-58	c05	N73-27062
US-PATENT-CLASS-29-470.1	c37	N75-12326	US-PATENT-CLASS-33-DIG.13	c35	N75-12273
US-PATENT-CLASS-29-472.7	c37	N75-15992	US-PATENT-CLASS-33-1	c14	N70-36907
US-PATENT-CLASS-29-472.9	c15	N69-39786	US-PATENT-CLASS-33-1G	c37	N76-21554
US-PATENT-CLASS-29-472.9	c26	N71-16037	US-PATENT-CLASS-33-1H	c35	N74-32877
US-PATENT-CLASS-29-472.9	c15	N72-22492	US-PATENT-CLASS-33-1SA	c14	N72-28436
US-PATENT-CLASS-29-473.1	c15	N72-22487	US-PATENT-CLASS-33-1SA	c19	N74-21015
US-PATENT-CLASS-29-473.1	c15	N72-22492	US-PATENT-CLASS-33-1SA	c08	N72-11172
US-PATENT-CLASS-29-473.1	c37	N75-15992	US-PATENT-CLASS-33-23B	c35	N74-32877
US-PATENT-CLASS-29-475	c37	N75-12326	US-PATENT-CLASS-33-31	c14	N71-21079
US-PATENT-CLASS-29-482	c05	N72-25121	US-PATENT-CLASS-33-46B	c19	N74-21015
US-PATENT-CLASS-29-482	c37	N74-18128	US-PATENT-CLASS-33-72	c15	N72-11386
US-PATENT-CLASS-29-487	c15	N73-33383	US-PATENT-CLASS-33-75R	c14	N72-28436
US-PATENT-CLASS-29-487	c37	N74-21055	US-PATENT-CLASS-33-96	c33	N75-30430
US-PATENT-CLASS-29-488	c15	N70-33311	US-PATENT-CLASS-33-125	c14	N72-11364
US-PATENT-CLASS-29-488	c37	N74-18128	US-PATENT-CLASS-33-147	c15	N71-19489
US-PATENT-CLASS-29-492	c15	N71-20443	US-PATENT-CLASS-33-148D	c35	N75-19615
US-PATENT-CLASS-29-492	c09	N72-25261	US-PATENT-CLASS-33-149	c14	N71-17657
US-PATENT-CLASS-29-494	c15	N73-33383	US-PATENT-CLASS-33-155R	c33	N76-19438
US-PATENT-CLASS-29-494	c37	N74-21055	US-PATENT-CLASS-33-174	c14	N69-21363
US-PATENT-CLASS-29-494	c37	N75-13261	US-PATENT-CLASS-33-174	c14	N71-17658
US-PATENT-CLASS-29-495	c15	N71-21078	US-PATENT-CLASS-33-174	c14	N71-24693

NUMBER INDEX

US-PATENT-CLASS-33-174B	c37	N76-21554	US-PATENT-CLASS-52-173	c15	N72-25454
US-PATENT-CLASS-33-174D	c33	N76-19338	US-PATENT-CLASS-52-173	c44	N77-31601
US-PATENT-CLASS-33-174S	c14	N72-22445	US-PATENT-CLASS-52-236	c39	N76-31562
US-PATENT-CLASS-33-180R	c35	N75-12273	US-PATENT-CLASS-52-249	c33	N71-25351
US-PATENT-CLASS-33-189	c15	N71-26145	US-PATENT-CLASS-52-272	c31	N71-24035
US-PATENT-CLASS-33-200C	c08	N72-11172	US-PATENT-CLASS-52-284	c32	N73-13921
US-PATENT-CLASS-33-207	c15	N71-15571	US-PATENT-CLASS-52-404	c33	N71-25351
US-PATENT-CLASS-33-268	c89	N74-30886	US-PATENT-CLASS-52-518	c44	N77-31601
US-PATENT-CLASS-33-285	c36	N74-21091	US-PATENT-CLASS-52-573	c15	N72-28496
US-PATENT-CLASS-33-286	c18	N76-14186	US-PATENT-CLASS-52-594	c15	N72-25454
US-PATENT-CLASS-33-356	c04	N76-20114	US-PATENT-CLASS-52-594	c32	N73-13921
US-PATENT-CLASS-33-356	c04	N77-19056	US-PATENT-CLASS-52-637	c39	N76-31562
US-PATENT-CLASS-34-155	c14	N73-28489	US-PATENT-CLASS-52-646	c31	N73-32749
US-PATENT-CLASS-34-160	c14	N73-28489	US-PATENT-CLASS-52-648	c11	N72-25287
US-PATENT-CLASS-34-162	c14	N73-28489	US-PATENT-CLASS-52-648	c39	N76-31562
US-PATENT-CLASS-34-162	c35	N74-15831	US-PATENT-CLASS-52-651	c39	N76-31562
US-PATENT-CLASS-35-8	c05	N72-16015	US-PATENT-CLASS-52-655	c11	N72-25287
US-PATENT-CLASS-35-10.2	c14	N71-15621	US-PATENT-CLASS-52-705	c37	N76-19437
US-PATENT-CLASS-35-12	c11	N70-34815	US-PATENT-CLASS-52-726	c39	N76-31562
US-PATENT-CLASS-35-12	c31	N70-34966	US-PATENT-CLASS-52-745	c39	N76-31562
US-PATENT-CLASS-35-12	c11	N71-10746	US-PATENT-CLASS-52-749	c39	N76-31562
US-PATENT-CLASS-35-12	c11	N71-10748	US-PATENT-CLASS-52-758F	c37	N76-19437
US-PATENT-CLASS-35-12	c11	N71-10776	US-PATENT-CLASS-53-9	c37	N77-23482
US-PATENT-CLASS-35-12	c11	N71-18773	US-PATENT-CLASS-53-22	c15	N71-23256
US-PATENT-CLASS-35-12	c11	N71-19494	US-PATENT-CLASS-53-22A	c15	N73-27405
US-PATENT-CLASS-35-12	c11	N71-21474	US-PATENT-CLASS-53-102	c15	N71-21528
US-PATENT-CLASS-35-12	c18	N76-14186	US-PATENT-CLASS-53-112A	c15	N73-27405
US-PATENT-CLASS-35-12C	c14	N73-27377	US-PATENT-CLASS-55-DIG.35	c54	N75-27761
US-PATENT-CLASS-35-12C	c09	N75-15662	US-PATENT-CLASS-55-16	c06	N72-31140
US-PATENT-CLASS-35-12E	c09	N74-30597	US-PATENT-CLASS-55-35	c05	N70-41297
US-PATENT-CLASS-35-12N	c09	N76-24280	US-PATENT-CLASS-55-43	c34	N74-30608
US-PATENT-CLASS-35-17	c05	N71-24606	US-PATENT-CLASS-55-55	c06	N72-31140
US-PATENT-CLASS-35-19	c10	N71-27365	US-PATENT-CLASS-55-67	c23	N77-17161
US-PATENT-CLASS-35-22R	c05	N73-13114	US-PATENT-CLASS-55-74	c23	N77-17161
US-PATENT-CLASS-35-29	c11	N71-16028	US-PATENT-CLASS-55-75	c15	N71-26185
US-PATENT-CLASS-35-29	c05	N71-28619	US-PATENT-CLASS-55-158	c18	N71-20742
US-PATENT-CLASS-35-35A	c71	N74-21014	US-PATENT-CLASS-55-158	c44	N77-22607
US-PATENT-CLASS-35-45	c14	N70-35394	US-PATENT-CLASS-55-159	c34	N74-30608
US-PATENT-CLASS-35-49	c12	N69-39988	US-PATENT-CLASS-55-160	c15	N71-15968
US-PATENT-CLASS-40-28	c12	N71-18603	US-PATENT-CLASS-55-179	c14	N71-17588
US-PATENT-CLASS-40-130	c09	N73-14215	US-PATENT-CLASS-55-179	c54	N77-32722
US-PATENT-CLASS-42-1F	c11	N72-22247	US-PATENT-CLASS-55-197	c23	N77-17161
US-PATENT-CLASS-42-215	c44	N76-29704	US-PATENT-CLASS-55-199	c34	N74-30608
US-PATENT-CLASS-44-77	c06	N71-23499	US-PATENT-CLASS-55-204	c15	N71-23023
US-PATENT-CLASS-47-1.2	c51	N75-25503	US-PATENT-CLASS-55-208	c14	N71-18483
US-PATENT-CLASS-47-1.4	c31	N73-32750	US-PATENT-CLASS-55-261	c35	N76-18401
US-PATENT-CLASS-47-17	c31	N73-32750	US-PATENT-CLASS-55-269	c54	N77-32722
US-PATENT-CLASS-47-39	c51	N75-25503	US-PATENT-CLASS-55-306	c28	N70-34788
US-PATENT-CLASS-47-58	c51	N75-25503	US-PATENT-CLASS-55-386	c35	N75-26334
US-PATENT-CLASS-48-61	c44	N77-10636	US-PATENT-CLASS-55-400	c11	N71-10777
US-PATENT-CLASS-48-63	c44	N76-18642	US-PATENT-CLASS-55-408	c15	N70-40062
US-PATENT-CLASS-48-75	c44	N76-18642	US-PATENT-CLASS-55-418	c15	N71-22721
US-PATENT-CLASS-48-95	c44	N76-18642	US-PATENT-CLASS-55-446	c15	N72-22489
US-PATENT-CLASS-48-95	c44	N76-29700	US-PATENT-CLASS-55-464	c15	N72-22489
US-PATENT-CLASS-48-116	c44	N76-18642	US-PATENT-CLASS-55-493	c14	N72-23457
US-PATENT-CLASS-48-116	c44	N77-10636	US-PATENT-CLASS-55-498	c14	N72-23457
US-PATENT-CLASS-48-117	c44	N76-18642	US-PATENT-CLASS-55-502	c14	N72-23457
US-PATENT-CLASS-48-117	c44	N77-10636	US-PATENT-CLASS-55-510	c25	N74-12813
US-PATENT-CLASS-48-197R	c44	N76-29704	US-PATENT-CLASS-55-518	c25	N74-12813
US-PATENT-CLASS-48-197R	c44	N77-10636	US-PATENT-CLASS-55-521	c14	N72-23457
US-PATENT-CLASS-48-212	c44	N77-10636	US-PATENT-CLASS-55-523	c34	N76-27515
US-PATENT-CLASS-48-215	c44	N76-29700	US-PATENT-CLASS-55-526	c34	N76-27515
US-PATENT-CLASS-49-68	c18	N74-22136	US-PATENT-CLASS-58-24	c10	N71-26326
US-PATENT-CLASS-51-57	c15	N71-22705	US-PATENT-CLASS-60-1	c15	N72-33477
US-PATENT-CLASS-51-97R	c37	N74-27905	US-PATENT-CLASS-60-1	c15	N73-13467
US-PATENT-CLASS-51-170	c15	N71-26134	US-PATENT-CLASS-60-23	c09	N71-26182
US-PATENT-CLASS-51-216	c15	N72-20444	US-PATENT-CLASS-60-23	c15	N72-12409
US-PATENT-CLASS-51-225	c37	N74-27905	US-PATENT-CLASS-60-23	c21	N72-31637
US-PATENT-CLASS-51-234	c37	N74-27905	US-PATENT-CLASS-60-23	c15	N73-13467
US-PATENT-CLASS-51-283	c46	N74-23069	US-PATENT-CLASS-60-25	c15	N73-24513
US-PATENT-CLASS-51-320	c15	N72-20444	US-PATENT-CLASS-60-25	c37	N74-21060
US-PATENT-CLASS-51-323	c15	N72-20444	US-PATENT-CLASS-60-26	c21	N72-31637
US-PATENT-CLASS-52-DIG.10	c18	N72-25540	US-PATENT-CLASS-60-26	c03	N73-20040
US-PATENT-CLASS-52-1	c15	N72-28496	US-PATENT-CLASS-60-35.3	c28	N70-33265
US-PATENT-CLASS-52-2	c32	N71-21045	US-PATENT-CLASS-60-35.3	c28	N70-40367
US-PATENT-CLASS-52-2	c44	N77-32583	US-PATENT-CLASS-60-35.5	c28	N70-33356
US-PATENT-CLASS-52-3	c31	N71-16080	US-PATENT-CLASS-60-35.5	c28	N70-34175
US-PATENT-CLASS-52-64	c31	N73-32749	US-PATENT-CLASS-60-35.5	c22	N70-34248
US-PATENT-CLASS-52-71	c18	N75-27040	US-PATENT-CLASS-60-35.5	c28	N70-36802
US-PATENT-CLASS-52-80	c18	N72-25540	US-PATENT-CLASS-60-35.5	c21	N70-36938
US-PATENT-CLASS-52-80	c18	N72-25541	US-PATENT-CLASS-60-35.5	c25	N70-36946
US-PATENT-CLASS-52-80	c31	N73-32749	US-PATENT-CLASS-60-35.5	c28	N70-37245
US-PATENT-CLASS-52-108	c15	N72-18477	US-PATENT-CLASS-60-35.5	c28	N70-37980
US-PATENT-CLASS-52-109	c31	N73-32749	US-PATENT-CLASS-60-35.5	c28	N71-18043
US-PATENT-CLASS-52-117	c44	N77-32582	US-PATENT-CLASS-60-35.6	c28	N71-15661
US-PATENT-CLASS-52-127	c15	N71-21531	US-PATENT-CLASS-60-35.6	c28	N70-33284
US-PATENT-CLASS-52-169	c15	N72-25454	US-PATENT-CLASS-60-35.6	c28	N70-33331
US-PATENT-CLASS-52-171	c11	N73-12265	US-PATENT-CLASS-60-35.6	c28	N70-33374
			US-PATENT-CLASS-60-35.6	c28	N70-33375
				c28	N70-34860

NUMBER INDEX

US-PATENT-CLASS-60-35.6	.....	c28	N70-35381	US-PATENT-CLASS-60-240	.....	c28	N73-14773
US-PATENT-CLASS-60-35.6	.....	c27	N70-35534	US-PATENT-CLASS-60-243	.....	c33	N71-21507
US-PATENT-CLASS-60-35.6	.....	c15	N70-36535	US-PATENT-CLASS-60-243	.....	c15	N71-21432
US-PATENT-CLASS-60-35.6	.....	c28	N70-36806	US-PATENT-CLASS-60-243	.....	c28	N73-13773
US-PATENT-CLASS-60-35.6	.....	c28	N70-36910	US-PATENT-CLASS-60-251	.....	c28	N70-41311
US-PATENT-CLASS-60-35.6	.....	c28	N70-38249	US-PATENT-CLASS-60-251	.....	c27	N71-21819
US-PATENT-CLASS-60-35.6	.....	c28	N70-38504	US-PATENT-CLASS-60-254	.....	c28	N72-20758
US-PATENT-CLASS-60-35.6	.....	c28	N70-38505	US-PATENT-CLASS-60-254	.....	c28	N73-24784
US-PATENT-CLASS-60-35.6	.....	c28	N70-38710	US-PATENT-CLASS-60-256	.....	c28	N73-24784
US-PATENT-CLASS-60-35.6	.....	c28	N70-39899	US-PATENT-CLASS-60-257	.....	c31	N70-41948
US-PATENT-CLASS-60-35.6	.....	c33	N71-15623	US-PATENT-CLASS-60-258	.....	c15	N70-22192
US-PATENT-CLASS-60-35.6	.....	c27	N71-15634	US-PATENT-CLASS-60-258	.....	c28	N71-22983
US-PATENT-CLASS-60-35.6	.....	c31	N71-15637	US-PATENT-CLASS-60-258	.....	c28	N71-28849
US-PATENT-CLASS-60-35.6	.....	c31	N71-15647	US-PATENT-CLASS-60-258	.....	c28	N72-17843
US-PATENT-CLASS-60-35.6	.....	c28	N71-15660	US-PATENT-CLASS-60-258	.....	c15	N72-25455
US-PATENT-CLASS-60-35.6	.....	c14	N71-27186	US-PATENT-CLASS-60-258	.....	c20	N74-13502
US-PATENT-CLASS-60-35.54	.....	c28	N70-34294	US-PATENT-CLASS-60-259	.....	c28	N70-41275
US-PATENT-CLASS-60-35.54	.....	c28	N70-38645	US-PATENT-CLASS-60-259	.....	c20	N74-13502
US-PATENT-CLASS-60-35.54	.....	c28	N71-29153	US-PATENT-CLASS-60-259	.....	c34	N77-30399
US-PATENT-CLASS-60-35.55	.....	c28	N70-34162	US-PATENT-CLASS-60-260	.....	c28	N70-41992
US-PATENT-CLASS-60-35.55	.....	c28	N70-38711	US-PATENT-CLASS-60-260	.....	c28	N72-18766
US-PATENT-CLASS-60-35.55	.....	c21	N71-15582	US-PATENT-CLASS-60-263	.....	c28	N71-24321
US-PATENT-CLASS-60-35.55	.....	c15	N71-28951	US-PATENT-CLASS-60-263	.....	c07	N77-28118
US-PATENT-CLASS-60-35.60	.....	c28	N71-15659	US-PATENT-CLASS-60-265	.....	c31	N71-20942
US-PATENT-CLASS-60-36	.....	c15	N72-33477	US-PATENT-CLASS-60-265	.....	c33	N72-25911
US-PATENT-CLASS-60-37	.....	c15	N73-13467	US-PATENT-CLASS-60-265	.....	c33	N73-25952
US-PATENT-CLASS-60-39.03	.....	c07	N77-23106	US-PATENT-CLASS-60-265	.....	c20	N76-14191
US-PATENT-CLASS-60-39.23	.....	c20	N76-14190	US-PATENT-CLASS-60-266	.....	c33	N71-28852
US-PATENT-CLASS-60-39.28R	.....	c28	N73-19793	US-PATENT-CLASS-60-266	.....	c28	N72-23810
US-PATENT-CLASS-60-39.28R	.....	c07	N77-23106	US-PATENT-CLASS-60-267	.....	c33	N71-29053
US-PATENT-CLASS-60-39.29	.....	c20	N76-14190	US-PATENT-CLASS-60-267	.....	c33	N72-25911
US-PATENT-CLASS-60-39.29	.....	c35	N76-14431	US-PATENT-CLASS-60-267	.....	c33	N73-25952
US-PATENT-CLASS-60-39.36	.....	c28	N71-20330	US-PATENT-CLASS-60-267	.....	c28	N73-32606
US-PATENT-CLASS-60-39.36	.....	c28	N71-28915	US-PATENT-CLASS-60-267	.....	c20	N76-14191
US-PATENT-CLASS-60-39.46	.....	c27	N71-15635	US-PATENT-CLASS-60-271	.....	c28	N72-11708
US-PATENT-CLASS-60-39.46	.....	c15	N74-27360	US-PATENT-CLASS-60-271	.....	c28	N72-23810
US-PATENT-CLASS-60-39.47	.....	c27	N71-16392	US-PATENT-CLASS-60-291	.....	c31	N73-13898
US-PATENT-CLASS-60-39.48	.....	c28	N70-38199	US-PATENT-CLASS-60-316	.....	c34	N76-18364
US-PATENT-CLASS-60-39.48	.....	c28	N70-39931	US-PATENT-CLASS-60-516	.....	c20	N75-24837
US-PATENT-CLASS-60-39.48	.....	c27	N71-28929	US-PATENT-CLASS-60-517	.....	c44	N76-29701
US-PATENT-CLASS-60-39.65	.....	c28	N71-28915	US-PATENT-CLASS-60-527	.....	c44	N74-33379
US-PATENT-CLASS-60-39.65	.....	c23	N73-30665	US-PATENT-CLASS-60-527	.....	c37	N77-12402
US-PATENT-CLASS-60-39.66	.....	c15	N70-36411	US-PATENT-CLASS-60-527	.....	c37	N77-19458
US-PATENT-CLASS-60-39.66	.....	c23	N73-30665	US-PATENT-CLASS-60-530	.....	c20	N75-24837
US-PATENT-CLASS-60-39.66	.....	c07	N77-23106	US-PATENT-CLASS-60-641	.....	c44	N75-32581
US-PATENT-CLASS-60-39.72	.....	c23	N73-30665	US-PATENT-CLASS-60-641	.....	c44	N77-32582
US-PATENT-CLASS-60-39.74	.....	c28	N70-33241	US-PATENT-CLASS-60-659	.....	c44	N75-32581
US-PATENT-CLASS-60-39.74	.....	c28	N72-17843	US-PATENT-CLASS-60-659	.....	c44	N76-31667
US-PATENT-CLASS-60-39.74A	.....	c15	N72-25455	US-PATENT-CLASS-61-83	.....	c18	N74-22136
US-PATENT-CLASS-60-39.74R	.....	c23	N73-30665	US-PATENT-CLASS-62-2	.....	c15	N71-15906
US-PATENT-CLASS-60-39.74R	.....	c20	N76-14190	US-PATENT-CLASS-62-3	.....	c20	N75-24837
US-PATENT-CLASS-60-39.48	.....	c28	N72-11709	US-PATENT-CLASS-62-4	.....	c44	N77-32581
US-PATENT-CLASS-60-51	.....	c15	N71-27754	US-PATENT-CLASS-62-6	.....	c15	N69-23190
US-PATENT-CLASS-60-53	.....	c37	N77-22479	US-PATENT-CLASS-62-6	.....	c23	N71-15467
US-PATENT-CLASS-60-54.5	.....	c15	N71-10658	US-PATENT-CLASS-62-6	.....	c15	N71-23025
US-PATENT-CLASS-60-97	.....	c03	N71-12260	US-PATENT-CLASS-62-6	.....	c23	N72-25619
US-PATENT-CLASS-60-108	.....	c33	N71-16104	US-PATENT-CLASS-62-6	.....	c37	N76-29590
US-PATENT-CLASS-60-200	.....	c28	N71-14044	US-PATENT-CLASS-62-6	.....	c44	N76-29701
US-PATENT-CLASS-60-200A	.....	c33	N72-25911	US-PATENT-CLASS-62-7	.....	c15	N73-12486
US-PATENT-CLASS-60-200A	.....	c33	N73-25952	US-PATENT-CLASS-62-15	.....	c06	N70-34946
US-PATENT-CLASS-60-202	.....	c28	N70-41922	US-PATENT-CLASS-62-40	.....	c15	N71-24044
US-PATENT-CLASS-60-202	.....	c28	N71-10574	US-PATENT-CLASS-62-45	.....	c15	N70-33323
US-PATENT-CLASS-60-202	.....	c25	N71-21694	US-PATENT-CLASS-62-45	.....	c31	N70-41871
US-PATENT-CLASS-60-202	.....	c28	N71-21822	US-PATENT-CLASS-62-45	.....	c33	N71-25351
US-PATENT-CLASS-60-202	.....	c28	N71-23081	US-PATENT-CLASS-62-45	.....	c33	N71-28892
US-PATENT-CLASS-60-202	.....	c28	N71-23293	US-PATENT-CLASS-62-45	.....	c15	N73-12486
US-PATENT-CLASS-60-202	.....	c28	N71-25213	US-PATENT-CLASS-62-45	.....	c35	N74-15093
US-PATENT-CLASS-60-202	.....	c28	N71-26173	US-PATENT-CLASS-62-49	.....	c31	N76-14284
US-PATENT-CLASS-60-202	.....	c28	N71-26642	US-PATENT-CLASS-62-50	.....	c15	N70-34247
US-PATENT-CLASS-60-202	.....	c28	N71-26781	US-PATENT-CLASS-62-51	.....	c15	N72-17453
US-PATENT-CLASS-60-202	.....	c28	N72-11709	US-PATENT-CLASS-62-55	.....	c15	N70-38020
US-PATENT-CLASS-60-202	.....	c28	N72-22770	US-PATENT-CLASS-62-55	.....	c34	N77-30399
US-PATENT-CLASS-60-202	.....	c28	N72-22771	US-PATENT-CLASS-62-55.5	.....	c11	N71-24964
US-PATENT-CLASS-60-202	.....	c28	N73-24783	US-PATENT-CLASS-62-55.5	.....	c15	N72-22484
US-PATENT-CLASS-60-202	.....	c25	N73-25760	US-PATENT-CLASS-62-56	.....	c05	N72-11084
US-PATENT-CLASS-60-202	.....	c28	N73-27699	US-PATENT-CLASS-62-80	.....	c23	N72-25619
US-PATENT-CLASS-60-202	.....	c20	N77-10148	US-PATENT-CLASS-62-85	.....	c23	N72-25619
US-PATENT-CLASS-60-202	.....	c20	N77-20162	US-PATENT-CLASS-62-89	.....	c05	N73-26071
US-PATENT-CLASS-60-211	.....	c28	N73-13773	US-PATENT-CLASS-62-93	.....	c15	N69-21465
US-PATENT-CLASS-60-214	.....	c15	N74-27360	US-PATENT-CLASS-62-93	.....	c03	N72-28025
US-PATENT-CLASS-60-215	.....	c06	N73-30097	US-PATENT-CLASS-62-93	.....	c77	N75-20139
US-PATENT-CLASS-60-215	.....	c15	N74-27360	US-PATENT-CLASS-62-100	.....	c34	N77-19353
US-PATENT-CLASS-60-217	.....	c12	N71-17631	US-PATENT-CLASS-62-121	.....	c34	N77-19353
US-PATENT-CLASS-60-225	.....	c28	N71-10780	US-PATENT-CLASS-62-129	.....	c31	N76-14284
US-PATENT-CLASS-60-226A	.....	c07	N77-17059	US-PATENT-CLASS-62-176	.....	c05	N73-26071
US-PATENT-CLASS-60-226B	.....	c07	N77-14025	US-PATENT-CLASS-62-207	.....	c05	N73-26071
US-PATENT-CLASS-60-226B	.....	c07	N77-28118	US-PATENT-CLASS-62-209	.....	c05	N73-26071
US-PATENT-CLASS-60-228	.....	c07	N77-17059	US-PATENT-CLASS-62-217	.....	c31	N77-10229
US-PATENT-CLASS-60-240	.....	c28	N71-24736	US-PATENT-CLASS-62-259	.....	c05	N73-20137

NUMBER INDEX

US-PATENT-CLASS-62-259	c05	N73-26071	US-PATENT-CLASS-73-15.6	c32	N74-25877
US-PATENT-CLASS-62-268	c14	N71-20427	US-PATENT-CLASS-73-15.6	c09	N74-19528
US-PATENT-CLASS-62-269	c34	N77-19353	US-PATENT-CLASS-73-15.6	c35	N76-24523
US-PATENT-CLASS-62-285	c77	N75-20139	US-PATENT-CLASS-73-15.6	c35	N77-22450
US-PATENT-CLASS-62-288	c77	N75-20139	US-PATENT-CLASS-73-15R	c33	N72-25913
US-PATENT-CLASS-62-289	c77	N75-20139	US-PATENT-CLASS-73-15R	c14	N73-28486
US-PATENT-CLASS-62-290	c77	N75-20139	US-PATENT-CLASS-73-15R	c25	N74-18551
US-PATENT-CLASS-62-315	c34	N77-19353	US-PATENT-CLASS-73-15R	c31	N74-27900
US-PATENT-CLASS-62-317	c77	N75-20139	US-PATENT-CLASS-73-15R	c09	N77-27131
US-PATENT-CLASS-62-384	c23	N71-24725	US-PATENT-CLASS-73-17	c06	N71-24607
US-PATENT-CLASS-62-467	c33	N70-37979	US-PATENT-CLASS-73-23	c14	N71-10774
US-PATENT-CLASS-62-467	c33	N71-17897	US-PATENT-CLASS-73-23	c05	N71-11202
US-PATENT-CLASS-62-467	c05	N72-11084	US-PATENT-CLASS-73-23	c52	N74-20728
US-PATENT-CLASS-62-467	c33	N72-25911	US-PATENT-CLASS-73-23	c35	N75-29380
US-PATENT-CLASS-62-467	c33	N73-25952	US-PATENT-CLASS-73-23.1	c06	N69-39936
US-PATENT-CLASS-62-467	c20	N75-24837	US-PATENT-CLASS-73-23.1	c06	N72-17094
US-PATENT-CLASS-62-475	c23	N72-25619	US-PATENT-CLASS-73-23.1	c06	N72-25146
US-PATENT-CLASS-62-514	c23	N71-26654	US-PATENT-CLASS-73-23.1	c25	N76-18245
US-PATENT-CLASS-62-514JT	c31	N77-10229	US-PATENT-CLASS-73-23.1	c23	N77-17161
US-PATENT-CLASS-64-18	c15	N71-28467	US-PATENT-CLASS-73-24	c06	N69-39733
US-PATENT-CLASS-64-27	c15	N71-28959	US-PATENT-CLASS-73-28	c14	N73-27376
US-PATENT-CLASS-64-28	c15	N69-27505	US-PATENT-CLASS-73-28	c14	N73-30395
US-PATENT-CLASS-65-DIG.11	c37	N74-21063	US-PATENT-CLASS-73-28	c35	N76-18401
US-PATENT-CLASS-65-3	c37	N75-26371	US-PATENT-CLASS-73-29	c14	N71-17701
US-PATENT-CLASS-65-7	c18	N71-23088	US-PATENT-CLASS-73-29	c14	N71-20741
US-PATENT-CLASS-65-43	c37	N75-15992	US-PATENT-CLASS-73-30	c14	N70-41681
US-PATENT-CLASS-65-59A	c35	N77-24455	US-PATENT-CLASS-73-32	c14	N70-41330
US-PATENT-CLASS-65-108	c35	N77-24455	US-PATENT-CLASS-73-32R	c76	N75-12810
US-PATENT-CLASS-72-34	c15	N71-21536	US-PATENT-CLASS-73-35	c33	N72-27959
US-PATENT-CLASS-72-46	c24	N75-33181	US-PATENT-CLASS-73-38	c18	N71-24934
US-PATENT-CLASS-72-53	c15	N71-18616	US-PATENT-CLASS-73-40	c35	N75-15931
US-PATENT-CLASS-72-53	c15	N73-32360	US-PATENT-CLASS-73-40.5	c14	N71-10779
US-PATENT-CLASS-72-54	c37	N76-14461	US-PATENT-CLASS-73-40.7	c15	N71-24910
US-PATENT-CLASS-72-56	c15	N70-34249	US-PATENT-CLASS-73-40.7	c14	N71-28992
US-PATENT-CLASS-72-56	c15	N71-24833	US-PATENT-CLASS-73-40.7	c35	N74-32879
US-PATENT-CLASS-72-56	c15	N71-24865	US-PATENT-CLASS-73-45.5	c12	N71-17573
US-PATENT-CLASS-72-56	c15	N71-26148	US-PATENT-CLASS-73-46	c35	N75-19612
US-PATENT-CLASS-72-60	c15	N71-24836	US-PATENT-CLASS-73-49.2	c32	N71-24285
US-PATENT-CLASS-72-61	c15	N71-26346	US-PATENT-CLASS-73-49.2	c35	N75-15931
US-PATENT-CLASS-72-63	c20	N75-18310	US-PATENT-CLASS-73-49.2	c35	N75-19612
US-PATENT-CLASS-72-63	c37	N76-18461	US-PATENT-CLASS-73-49.3	c14	N71-26672
US-PATENT-CLASS-72-83	c15	N71-22723	US-PATENT-CLASS-73-49.8	c14	N69-27503
US-PATENT-CLASS-72-253	c15	N71-22797	US-PATENT-CLASS-73-49.8	c15	N71-29132
US-PATENT-CLASS-72-258	c15	N73-13464	US-PATENT-CLASS-73-57	c14	N71-17584
US-PATENT-CLASS-72-307	c15	N72-12408	US-PATENT-CLASS-73-57	c14	N73-14429
US-PATENT-CLASS-72-354	c15	N71-23811	US-PATENT-CLASS-73-60	c14	N73-14429
US-PATENT-CLASS-72-363	c37	N76-14461	US-PATENT-CLASS-73-61	c14	N71-26199
US-PATENT-CLASS-72-364	c15	N71-18579	US-PATENT-CLASS-73-61.1C	c23	N77-17161
US-PATENT-CLASS-72-369	c15	N71-24679	US-PATENT-CLASS-73-65	c14	N71-22992
US-PATENT-CLASS-72-447	c15	N73-13463	US-PATENT-CLASS-73-67.1	c35	N75-12271
US-PATENT-CLASS-72-453	c37	N76-18454	US-PATENT-CLASS-73-67.2	c11	N69-21540
US-PATENT-CLASS-72-467	c15	N71-23817	US-PATENT-CLASS-73-67.2	c15	N71-18132
US-PATENT-CLASS-72-476	c15	N73-13463	US-PATENT-CLASS-73-67.2	c14	N72-22440
US-PATENT-CLASS-73-1	c10	N71-13545	US-PATENT-CLASS-73-67.3	c32	N73-26910
US-PATENT-CLASS-73-1	c09	N71-22988	US-PATENT-CLASS-73-67.5R	c38	N74-15395
US-PATENT-CLASS-73-1B	c35	N76-24523	US-PATENT-CLASS-73-67.7	c39	N77-28511
US-PATENT-CLASS-73-1DV	c14	N73-27379	US-PATENT-CLASS-73-67.8S	c35	N74-10415
US-PATENT-CLASS-73-1F	c35	N74-21019	US-PATENT-CLASS-73-67.8S	c38	N74-15130
US-PATENT-CLASS-73-1R	c14	N71-29134	US-PATENT-CLASS-73-67.9	c52	N74-20726
US-PATENT-CLASS-73-1R	c35	N75-15932	US-PATENT-CLASS-73-69	c71	N74-31148
US-PATENT-CLASS-73-1R	c35	N76-15432	US-PATENT-CLASS-73-70.2	c14	N71-10616
US-PATENT-CLASS-73-3	c34	N74-27730	US-PATENT-CLASS-73-71.2	c14	N70-34794
US-PATENT-CLASS-73-4	c14	N71-18481	US-PATENT-CLASS-73-71.3	c35	N74-15146
US-PATENT-CLASS-73-4	c14	N71-23036	US-PATENT-CLASS-73-71.4	c32	N71-16428
US-PATENT-CLASS-73-4	c14	N71-23755	US-PATENT-CLASS-73-71.4	c32	N71-26681
US-PATENT-CLASS-73-4	c14	N73-30390	US-PATENT-CLASS-73-71.5R	c71	N74-31148
US-PATENT-CLASS-73-4R	c35	N74-13132	US-PATENT-CLASS-73-71.5U	c38	N74-15395
US-PATENT-CLASS-73-4V	c35	N74-15092	US-PATENT-CLASS-73-71.6	c14	N71-27185
US-PATENT-CLASS-73-9	c14	N71-22995	US-PATENT-CLASS-73-71.6	c14	N72-27412
US-PATENT-CLASS-73-9	c35	N76-31489	US-PATENT-CLASS-73-71.6	c14	N73-13416
US-PATENT-CLASS-73-12	c14	N71-23225	US-PATENT-CLASS-73-71.6	c14	N73-19421
US-PATENT-CLASS-73-12	c14	N71-26161	US-PATENT-CLASS-73-71.6	c35	N77-18417
US-PATENT-CLASS-73-12	c14	N72-16282	US-PATENT-CLASS-73-76	c06	N72-17095
US-PATENT-CLASS-73-12	c14	N72-25411	US-PATENT-CLASS-73-79	c14	N71-26161
US-PATENT-CLASS-73-12	c14	N73-32327	US-PATENT-CLASS-73-81	c14	N73-32321
US-PATENT-CLASS-73-12	c35	N74-21062	US-PATENT-CLASS-73-84	c14	N71-22765
US-PATENT-CLASS-73-12	c35	N75-33367	US-PATENT-CLASS-73-84	c14	N73-19420
US-PATENT-CLASS-73-12	c75	N76-14931	US-PATENT-CLASS-73-84	c35	N77-27367
US-PATENT-CLASS-73-12	c35	N77-18417	US-PATENT-CLASS-73-85	c14	N72-33377
US-PATENT-CLASS-73-15	c14	N70-34156	US-PATENT-CLASS-73-86	c14	N69-39975
US-PATENT-CLASS-73-15	c14	N71-15992	US-PATENT-CLASS-73-86	c33	N71-21586
US-PATENT-CLASS-73-15	c14	N71-22964	US-PATENT-CLASS-73-86	c33	N73-27796
US-PATENT-CLASS-73-15	c11	N71-24985	US-PATENT-CLASS-73-86	c34	N74-15652
US-PATENT-CLASS-73-15	c11	N71-28629	US-PATENT-CLASS-73-88	c32	N71-17645
US-PATENT-CLASS-73-15.4	c14	N71-17659	US-PATENT-CLASS-73-88.5	c14	N70-34705
US-PATENT-CLASS-73-15.4	c35	N74-32879	US-PATENT-CLASS-73-88.5	c14	N70-34799
US-PATENT-CLASS-73-15.6	c14	N70-35368	US-PATENT-CLASS-73-88.5	c14	N71-17656
US-PATENT-CLASS-73-15.6	c14	N71-24234	US-PATENT-CLASS-73-88.5	c14	N71-21091
US-PATENT-CLASS-73-15.6	c14	N71-26136	US-PATENT-CLASS-73-88.5	c14	N71-23087

NUMBER INDEX

US-PATENT-CLASS-73-88.5	c14	N71-24233	US-PATENT-CLASS-73-147	c12	N73-28144
US-PATENT-CLASS-73-88.5	c09	N72-22200	US-PATENT-CLASS-73-147	c09	N74-17955
US-PATENT-CLASS-73-88.5	c33	N75-31329	US-PATENT-CLASS-73-147	c34	N74-27730
US-PATENT-CLASS-73-88.5	c38	N76-28563	US-PATENT-CLASS-73-147	c09	N75-12969
US-PATENT-CLASS-73-88.5R	c15	N72-17452	US-PATENT-CLASS-73-147	c09	N76-23273
US-PATENT-CLASS-73-88.5R	c32	N73-26910	US-PATENT-CLASS-73-147	c34	N76-27517
US-PATENT-CLASS-73-88.5R	c52	N74-27864	US-PATENT-CLASS-73-147	c09	N77-10071
US-PATENT-CLASS-73-88.5R	c35	N76-14430	US-PATENT-CLASS-73-149	c14	N72-11363
US-PATENT-CLASS-73-88.5SD	c33	N76-19338	US-PATENT-CLASS-73-149	c52	N74-10975
US-PATENT-CLASS-73-88A	c32	N73-20740	US-PATENT-CLASS-73-161	c11	N72-25288
US-PATENT-CLASS-73-88R	c35	N74-13129	US-PATENT-CLASS-73-170	c14	N71-14996
US-PATENT-CLASS-73-88R	c35	N77-22449	US-PATENT-CLASS-73-170	c17	N73-32415
US-PATENT-CLASS-73-88R	c39	N77-28511	US-PATENT-CLASS-73-170R	c07	N73-20175
US-PATENT-CLASS-73-90	c32	N70-42003	US-PATENT-CLASS-73-170R	c14	N73-32327
US-PATENT-CLASS-73-90	c32	N71-25360	US-PATENT-CLASS-73-170R	c33	N74-27862
US-PATENT-CLASS-73-90	c14	N73-20476	US-PATENT-CLASS-73-170R	c35	N75-33367
US-PATENT-CLASS-73-91	c14	N73-20476	US-PATENT-CLASS-73-170R	c91	N76-30131
US-PATENT-CLASS-73-91	c32	N73-26910	US-PATENT-CLASS-73-178	c14	N70-36807
US-PATENT-CLASS-73-91	c09	N74-19528	US-PATENT-CLASS-73-178	c14	N70-40157
US-PATENT-CLASS-73-94	c14	N73-32323	US-PATENT-CLASS-73-178R	c35	N75-29381
US-PATENT-CLASS-73-95	c15	N71-24834	US-PATENT-CLASS-73-178R	c04	N77-19056
US-PATENT-CLASS-73-95	c14	N72-11364	US-PATENT-CLASS-73-182	c14	N73-13415
US-PATENT-CLASS-73-95	c35	N76-18400	US-PATENT-CLASS-73-182	c35	N74-32878
US-PATENT-CLASS-73-95	c35	N77-22450	US-PATENT-CLASS-73-182	c35	N76-14429
US-PATENT-CLASS-73-97	c14	N71-15600	US-PATENT-CLASS-73-189	c20	N71-16281
US-PATENT-CLASS-73-99	c14	N71-10781	US-PATENT-CLASS-73-189	c02	N71-23007
US-PATENT-CLASS-73-100	c15	N70-41993	US-PATENT-CLASS-73-189	c14	N71-23726
US-PATENT-CLASS-73-100	c32	N72-25877	US-PATENT-CLASS-73-189	c14	N73-13415
US-PATENT-CLASS-73-103	c15	N71-17696	US-PATENT-CLASS-73-189	c14	N73-25460
US-PATENT-CLASS-73-103	c14	N72-27412	US-PATENT-CLASS-73-189	c35	N76-24524
US-PATENT-CLASS-73-103	c14	N73-32323	US-PATENT-CLASS-73-189	c34	N76-27517
US-PATENT-CLASS-73-103	c35	N76-18400	US-PATENT-CLASS-73-189	c34	N77-27345
US-PATENT-CLASS-73-104	c35	N74-32879	US-PATENT-CLASS-73-190	c33	N71-15641
US-PATENT-CLASS-73-105	c14	N70-34161	US-PATENT-CLASS-73-190	c14	N71-22989
US-PATENT-CLASS-73-105	c14	N71-17586	US-PATENT-CLASS-73-190	c33	N71-23085
US-PATENT-CLASS-73-116	c11	N70-33278	US-PATENT-CLASS-73-190	c33	N71-29051
US-PATENT-CLASS-73-116	c11	N70-34844	US-PATENT-CLASS-73-190H	c35	N74-22095
US-PATENT-CLASS-73-116	c14	N70-40203	US-PATENT-CLASS-73-190R	c34	N74-27859
US-PATENT-CLASS-73-116	c11	N70-41677	US-PATENT-CLASS-73-194	c14	N70-41994
US-PATENT-CLASS-73-116	c11	N71-10604	US-PATENT-CLASS-73-194	c14	N71-23226
US-PATENT-CLASS-73-116	c31	N71-15643	US-PATENT-CLASS-73-194	c12	N71-26546
US-PATENT-CLASS-73-117	c14	N71-22965	US-PATENT-CLASS-73-194A	c14	N72-17329
US-PATENT-CLASS-73-117.1	c11	N72-27262	US-PATENT-CLASS-73-194E	c14	N73-20478
US-PATENT-CLASS-73-117.4	c14	N71-20429	US-PATENT-CLASS-73-194E	c05	N73-32015
US-PATENT-CLASS-73-117.4	c28	N71-27094	US-PATENT-CLASS-73-194EM	c14	N73-32326
US-PATENT-CLASS-73-117.4	c35	N75-29382	US-PATENT-CLASS-73-194FM	c35	N74-21018
US-PATENT-CLASS-73-133	c14	N71-23725	US-PATENT-CLASS-73-194F	c14	N72-11365
US-PATENT-CLASS-73-133	c15	N72-22482	US-PATENT-CLASS-73-194M	c05	N73-32015
US-PATENT-CLASS-73-133R	c35	N77-14407	US-PATENT-CLASS-73-194M	c35	N75-30503
US-PATENT-CLASS-73-134	c14	N70-40201	US-PATENT-CLASS-73-194R	c34	N76-27517
US-PATENT-CLASS-73-136	c14	N70-34818	US-PATENT-CLASS-73-195	c35	N75-30503
US-PATENT-CLASS-73-136R	c15	N72-26371	US-PATENT-CLASS-73-198	c14	N69-24257
US-PATENT-CLASS-73-140	c11	N72-25288	US-PATENT-CLASS-73-198	c14	N72-17327
US-PATENT-CLASS-73-141	c14	N70-41957	US-PATENT-CLASS-73-204	c12	N71-17569
US-PATENT-CLASS-73-141	c15	N71-20441	US-PATENT-CLASS-73-204	c35	N76-24524
US-PATENT-CLASS-73-141	c14	N71-23790	US-PATENT-CLASS-73-204	c35	N77-20400
US-PATENT-CLASS-73-141	c26	N71-25490	US-PATENT-CLASS-73-212	c14	N70-36824
US-PATENT-CLASS-73-141A	c14	N72-21405	US-PATENT-CLASS-73-212	c14	N73-13415
US-PATENT-CLASS-73-141A	c14	N72-22437	US-PATENT-CLASS-73-212	c35	N76-14429
US-PATENT-CLASS-73-141A	c35	N74-26945	US-PATENT-CLASS-73-221	c35	N75-15611
US-PATENT-CLASS-73-141A	c35	N74-27865	US-PATENT-CLASS-73-228	c34	N77-27345
US-PATENT-CLASS-73-141A	c35	N75-33369	US-PATENT-CLASS-73-290	c14	N71-10500
US-PATENT-CLASS-73-141AB	c14	N72-33377	US-PATENT-CLASS-73-290	c14	N71-21007
US-PATENT-CLASS-73-142	c15	N70-40180	US-PATENT-CLASS-73-290B	c14	N72-11363
US-PATENT-CLASS-73-142	c14	N71-20439	US-PATENT-CLASS-73-295	c23	N71-17802
US-PATENT-CLASS-73-143	c35	N75-19615	US-PATENT-CLASS-73-295	c31	N76-14284
US-PATENT-CLASS-73-143	c14	N75-24794	US-PATENT-CLASS-73-301	c12	N71-26387
US-PATENT-CLASS-73-144	c15	N71-22878	US-PATENT-CLASS-73-304	c14	N72-22442
US-PATENT-CLASS-73-147	c11	N70-33287	US-PATENT-CLASS-73-304C	c14	N71-29134
US-PATENT-CLASS-73-147	c14	N70-33386	US-PATENT-CLASS-73-339	c33	N73-27796
US-PATENT-CLASS-73-147	c14	N70-34813	US-PATENT-CLASS-73-341	c14	N71-15598
US-PATENT-CLASS-73-147	c11	N70-36913	US-PATENT-CLASS-73-343	c33	N71-16356
US-PATENT-CLASS-73-147	c14	N70-40400	US-PATENT-CLASS-73-343	c11	N71-21475
US-PATENT-CLASS-73-147	c14	N70-41366	US-PATENT-CLASS-73-343R	c52	N77-10780
US-PATENT-CLASS-73-147	c11	N71-15926	US-PATENT-CLASS-73-355	c14	N71-27323
US-PATENT-CLASS-73-147	c09	N71-16086	US-PATENT-CLASS-73-355	c14	N72-28437
US-PATENT-CLASS-73-147	c12	N71-20436	US-PATENT-CLASS-73-355R	c14	N72-28437
US-PATENT-CLASS-73-147	c09	N71-20816	US-PATENT-CLASS-73-356	c35	N75-25122
US-PATENT-CLASS-73-147	c11	N71-21481	US-PATENT-CLASS-73-362AR	c35	N77-27368
US-PATENT-CLASS-73-147	c11	N71-23030	US-PATENT-CLASS-73-379	c05	N73-27941
US-PATENT-CLASS-73-147	c15	N71-27006	US-PATENT-CLASS-73-379	c05	N73-30078
US-PATENT-CLASS-73-147	c15	N71-28740	US-PATENT-CLASS-73-379	c35	N75-15932
US-PATENT-CLASS-73-147	c11	N71-33612	US-PATENT-CLASS-73-382	c10	N71-13537
US-PATENT-CLASS-73-147	c11	N72-17183	US-PATENT-CLASS-73-382	c14	N71-17587
US-PATENT-CLASS-73-147	c14	N72-21407	US-PATENT-CLASS-73-384	c15	N70-37925
US-PATENT-CLASS-73-147	c11	N72-22246	US-PATENT-CLASS-73-388	c35	N74-32878
US-PATENT-CLASS-73-147	c11	N73-12264	US-PATENT-CLASS-73-389	c12	N71-28692
US-PATENT-CLASS-73-147	c14	N73-13415	US-PATENT-CLASS-73-398	c14	N70-34816
US-PATENT-CLASS-73-147	c12	N73-25262	US-PATENT-CLASS-73-398	c14	N71-21072

NUMBER INDEX

US-PATENT-CLASS-73-398	c09	N71-24597	US-PATENT-CLASS-74-471	c15	N71-20740
US-PATENT-CLASS-73-398	c14	N73-30394	US-PATENT-CLASS-74-471XY	c54	N75-27760
US-PATENT-CLASS-73-398AR	c52	N74-27566	US-PATENT-CLASS-74-480B	c05	N75-12930
US-PATENT-CLASS-73-398AR	c52	N76-29896	US-PATENT-CLASS-74-501R	c15	N72-22485
US-PATENT-CLASS-73-398C	c14	N72-22438	US-PATENT-CLASS-74-519	c03	N70-41954
US-PATENT-CLASS-73-398C	c33	N76-21390	US-PATENT-CLASS-74-594.6	c37	N74-18127
US-PATENT-CLASS-73-399	c37	N76-18454	US-PATENT-CLASS-74-594.7	c37	N74-18127
US-PATENT-CLASS-73-400	c14	N71-23093	US-PATENT-CLASS-74-665B	c37	N76-15457
US-PATENT-CLASS-73-400	c14	N71-24232	US-PATENT-CLASS-74-675	c37	N74-27901
US-PATENT-CLASS-73-401	c14	N70-34820	US-PATENT-CLASS-74-710	c37	N74-27901
US-PATENT-CLASS-73-419	c14	N71-22752	US-PATENT-CLASS-74-820	c37	N75-13266
US-PATENT-CLASS-73-420	c35	N74-13132	US-PATENT-CLASS-75-.5E	c17	N72-22530
US-PATENT-CLASS-73-421.5	c14	N73-12444	US-PATENT-CLASS-75-DIG.1	c18	N72-25539
US-PATENT-CLASS-73-421.5R	c13	N72-25323	US-PATENT-CLASS-75-DIG.1	c37	N75-26371
US-PATENT-CLASS-73-421.5R	c14	N73-30395	US-PATENT-CLASS-75-0.5EB	c15	N72-25448
US-PATENT-CLASS-73-421.5R	c52	N74-20728	US-PATENT-CLASS-75-20F	c15	N72-11387
US-PATENT-CLASS-73-421.5R	c35	N76-18401	US-PATENT-CLASS-75-63	c15	N71-27184
US-PATENT-CLASS-73-421.5R	c35	N77-32456	US-PATENT-CLASS-75-65B	c24	N77-27187
US-PATENT-CLASS-73-421R	c54	N76-14804	US-PATENT-CLASS-75-66	c17	N71-26773
US-PATENT-CLASS-73-422	c14	N71-20435	US-PATENT-CLASS-75-66	c06	N73-13129
US-PATENT-CLASS-73-422GC	c13	N72-25323	US-PATENT-CLASS-75-66	c17	N73-28573
US-PATENT-CLASS-73-422TC	c13	N72-25323	US-PATENT-CLASS-75-122.7	c37	N77-19458
US-PATENT-CLASS-73-425.2	c91	N76-30131	US-PATENT-CLASS-75-135	c18	N73-32437
US-PATENT-CLASS-73-425.6	c15	N72-21465	US-PATENT-CLASS-75-135	c24	N77-27187
US-PATENT-CLASS-73-432	c11	N70-34786	US-PATENT-CLASS-75-139	c24	N77-27187
US-PATENT-CLASS-73-432	c11	N70-38675	US-PATENT-CLASS-75-142	c17	N71-40743
US-PATENT-CLASS-73-432	c05	N70-42000	US-PATENT-CLASS-75-170	c17	N71-15644
US-PATENT-CLASS-73-432	c31	N71-16221	US-PATENT-CLASS-75-170	c17	N71-16025
US-PATENT-CLASS-73-432	c27	N71-16223	US-PATENT-CLASS-75-170	c17	N71-23248
US-PATENT-CLASS-73-432	c30	N71-17788	US-PATENT-CLASS-75-170	c17	N72-22535
US-PATENT-CLASS-73-432	c14	N71-23227	US-PATENT-CLASS-75-170	c37	N77-19458
US-PATENT-CLASS-73-432	c10	N71-26339	US-PATENT-CLASS-75-170	c26	N77-20201
US-PATENT-CLASS-73-432	c11	N71-28629	US-PATENT-CLASS-75-170	c26	N77-32279
US-PATENT-CLASS-73-432	c14	N71-30026	US-PATENT-CLASS-75-170	c26	N77-32280
US-PATENT-CLASS-73-432	c35	N74-21062	US-PATENT-CLASS-75-171	c17	N70-33283
US-PATENT-CLASS-73-432PS	c76	N75-12810	US-PATENT-CLASS-75-171	c17	N70-36616
US-PATENT-CLASS-73-432PS	c35	N75-33367	US-PATENT-CLASS-75-171	c17	N71-16026
US-PATENT-CLASS-73-432R	c33	N73-27796	US-PATENT-CLASS-75-171	c17	N73-32415
US-PATENT-CLASS-73-432R	c91	N76-30131	US-PATENT-CLASS-75-172	c17	N71-23365
US-PATENT-CLASS-73-432R	c35	N77-19385	US-PATENT-CLASS-75-173	c26	N75-27126
US-PATENT-CLASS-73-432SD	c11	N72-27262	US-PATENT-CLASS-75-173	c26	N75-27127
US-PATENT-CLASS-73-432SD	c11	N73-20267	US-PATENT-CLASS-75-178R	c04	N76-20114
US-PATENT-CLASS-73-432SD	c35	N77-18417	US-PATENT-CLASS-75-200	c26	N74-10521
US-PATENT-CLASS-73-492	c14	N72-25411	US-PATENT-CLASS-75-200	c37	N74-13179
US-PATENT-CLASS-73-493	c17	N76-29347	US-PATENT-CLASS-75-200	c24	N75-13032
US-PATENT-CLASS-73-497	c14	N71-30265	US-PATENT-CLASS-75-200	c37	N75-26371
US-PATENT-CLASS-73-497	c35	N74-15094	US-PATENT-CLASS-75-202	c17	N71-15468
US-PATENT-CLASS-73-505	c23	N71-16098	US-PATENT-CLASS-75-204	c18	N71-22894
US-PATENT-CLASS-73-505	c12	N75-24774	US-PATENT-CLASS-75-206	c15	N72-25448
US-PATENT-CLASS-73-515	c14	N72-25410	US-PATENT-CLASS-75-208	c18	N72-25539
US-PATENT-CLASS-73-517	c11	N70-38196	US-PATENT-CLASS-75-208R	c37	N75-26371
US-PATENT-CLASS-73-517	c14	N70-41682	US-PATENT-CLASS-75-211	c18	N72-25539
US-PATENT-CLASS-73-517	c14	N71-15969	US-PATENT-CLASS-75-212	c37	N75-26371
US-PATENT-CLASS-73-517B	c35	N74-15094	US-PATENT-CLASS-75-213	c15	N72-25448
US-PATENT-CLASS-73-517R	c17	N76-29347	US-PATENT-CLASS-75-213	c37	N74-13179
US-PATENT-CLASS-73-521	c14	N72-25410	US-PATENT-CLASS-75-214	c37	N74-13179
US-PATENT-CLASS-73-557	c35	N75-19614	US-PATENT-CLASS-75-214	c37	N75-26371
US-PATENT-CLASS-73-557	c07	N76-27232	US-PATENT-CLASS-75-222	c28	N70-38197
US-PATENT-CLASS-74-2	c15	N71-24600	US-PATENT-CLASS-75-222	c37	N75-26371
US-PATENT-CLASS-74-2	c31	N73-14855	US-PATENT-CLASS-75-225	c34	N76-27515
US-PATENT-CLASS-74-5.5	c35	N74-28097	US-PATENT-CLASS-75-226	c18	N72-25539
US-PATENT-CLASS-74-5.6	c35	N74-15094	US-PATENT-CLASS-75-226	c26	N74-10521
US-PATENT-CLASS-74-5.7	c35	N74-18323	US-PATENT-CLASS-75-226	c37	N74-13179
US-PATENT-CLASS-74-5.7	c15	N76-14158	US-PATENT-CLASS-78-1	c15	N70-33330
US-PATENT-CLASS-74-5.12	c31	N71-26537	US-PATENT-CLASS-81-3R	c15	N71-29133
US-PATENT-CLASS-74-5.22	c21	N73-13644	US-PATENT-CLASS-81-56	c37	N76-20480
US-PATENT-CLASS-74-5.34	c04	N76-26175	US-PATENT-CLASS-81-57.31	c37	N76-20480
US-PATENT-CLASS-74-5.47	c21	N71-23289	US-PATENT-CLASS-81-57.38	c15	N73-30457
US-PATENT-CLASS-74-5F	c15	N73-12488	US-PATENT-CLASS-81-63.1	c15	N71-17805
US-PATENT-CLASS-74-18.2	c11	N71-27036	US-PATENT-CLASS-82-14	c15	N71-22722
US-PATENT-CLASS-74-63	c15	N71-17692	US-PATENT-CLASS-82-24R	c14	N72-16283
US-PATENT-CLASS-74-89.15	c15	N71-26635	US-PATENT-CLASS-83-8	c15	N72-27485
US-PATENT-CLASS-74-89.15	c15	N72-21462	US-PATENT-CLASS-83-451	c37	N77-14478
US-PATENT-CLASS-74-89.18	c15	N71-23809	US-PATENT-CLASS-83-452	c39	N74-13131
US-PATENT-CLASS-74-96	c37	N77-22482	US-PATENT-CLASS-83-467	c15	N71-22798
US-PATENT-CLASS-74-100	c15	N71-24045	US-PATENT-CLASS-83-467R	c37	N77-14478
US-PATENT-CLASS-74-105	c09	N72-22195	US-PATENT-CLASS-83-522	c15	N72-27485
US-PATENT-CLASS-74-126	c15	N71-21529	US-PATENT-CLASS-83-562	c15	N72-27485
US-PATENT-CLASS-74-217R	c37	N74-23070	US-PATENT-CLASS-83-563	c15	N72-27485
US-PATENT-CLASS-74-384	c37	N76-15457	US-PATENT-CLASS-83-588	c15	N72-27485
US-PATENT-CLASS-74-409	c15	N71-21744	US-PATENT-CLASS-83-602	c39	N74-13131
US-PATENT-CLASS-74-424.8	c15	N71-26635	US-PATENT-CLASS-83-917	c39	N74-13131
US-PATENT-CLASS-74-424.8VA	c37	N75-15050	US-PATENT-CLASS-85-1	c15	N72-22488
US-PATENT-CLASS-74-436	c37	N75-13266	US-PATENT-CLASS-85-3	c15	N71-17653
US-PATENT-CLASS-74-468	c15	N71-24984	US-PATENT-CLASS-85-5B	c15	N72-11385
US-PATENT-CLASS-74-469	c15	N72-21463	US-PATENT-CLASS-85-7	c15	N71-23254
US-PATENT-CLASS-74-469	c15	N72-28495	US-PATENT-CLASS-85-33	c15	N71-15922
US-PATENT-CLASS-74-471	c05	N70-41581	US-PATENT-CLASS-85-33	c15	N71-21489
US-PATENT-CLASS-74-471	c03	N70-42073	US-PATENT-CLASS-86-1	c28	N71-26779

NUMBER INDEX

US-PATENT-CLASS-86-1R	c28	N77-10213	US-PATENT-CLASS-102-50	c31	N71-24750
US-PATENT-CLASS-86-1R	c20	N77-17143	US-PATENT-CLASS-102-70.2	c09	N71-18599
US-PATENT-CLASS-86-20.2	c28	N71-26779	US-PATENT-CLASS-102-70.2A	c28	N74-27425
US-PATENT-CLASS-86-20R	c20	N77-17143	US-PATENT-CLASS-102-70.2R	c19	N74-15089
US-PATENT-CLASS-88-1	c21	N70-35427	US-PATENT-CLASS-102-70.2R	c28	N74-27425
US-PATENT-CLASS-88-1	c21	N71-22880	US-PATENT-CLASS-102-90	c15	N74-27360
US-PATENT-CLASS-88-14	c14	N70-34298	US-PATENT-CLASS-102-95	c11	N73-32152
US-PATENT-CLASS-88-14	c14	N70-40003	US-PATENT-CLASS-102-99	c28	N77-10213
US-PATENT-CLASS-88-14	c14	N70-41946	US-PATENT-CLASS-102-101	c28	N71-26779
US-PATENT-CLASS-88-14	c14	N70-41955	US-PATENT-CLASS-102-105	c33	N72-17947
US-PATENT-CLASS-88-14	c09	N71-22999	US-PATENT-CLASS-102-105	c33	N72-25911
US-PATENT-CLASS-88-16	c14	N70-33254	US-PATENT-CLASS-102-105	c33	N73-25952
US-PATENT-CLASS-88-24	c23	N71-21882	US-PATENT-CLASS-102-105	c27	N74-27037
US-PATENT-CLASS-89-1	c03	N70-34667	US-PATENT-CLASS-103-5R	c04	N73-27052
US-PATENT-CLASS-89-1	c15	N71-16078	US-PATENT-CLASS-103-1	c26	N71-21824
US-PATENT-CLASS-89-1.5	c31	N71-15675	US-PATENT-CLASS-103-37	c28	N71-14058
US-PATENT-CLASS-89-1.5	c15	N71-24600	US-PATENT-CLASS-103-48	c15	N71-24042
US-PATENT-CLASS-89-1.7	c11	N70-38202	US-PATENT-CLASS-104-1	c05	N71-28619
US-PATENT-CLASS-89-1.7	c30	N70-40353	US-PATENT-CLASS-104-23PS	c85	N74-34672
US-PATENT-CLASS-89-1.7	c03	N71-12258	US-PATENT-CLASS-104-138R	c85	N74-34672
US-PATENT-CLASS-89-1.7	c03	N71-12259	US-PATENT-CLASS-104-139	c05	N71-28619
US-PATENT-CLASS-89-1.801	c20	N76-22296	US-PATENT-CLASS-106-13	c23	N75-14834
US-PATENT-CLASS-89-1.806	c15	N71-24043	US-PATENT-CLASS-106-15	c18	N71-14014
US-PATENT-CLASS-89-1.811	c15	N72-17455	US-PATENT-CLASS-106-15	c18	N71-15469
US-PATENT-CLASS-89-8	c11	N71-18578	US-PATENT-CLASS-106-15FP	c27	N74-27037
US-PATENT-CLASS-89-8	c11	N73-32152	US-PATENT-CLASS-106-15FP	c27	N76-24405
US-PATENT-CLASS-89-8	c75	N76-14931	US-PATENT-CLASS-106-15R	c23	N75-14834
US-PATENT-CLASS-89-8	c75	N76-17951	US-PATENT-CLASS-106-39	c26	N72-28762
US-PATENT-CLASS-90-11	c15	N71-33518	US-PATENT-CLASS-106-39P	c18	N73-14584
US-PATENT-CLASS-90-12	c15	N71-22799	US-PATENT-CLASS-106-40	c18	N71-22998
US-PATENT-CLASS-90-12.5	c37	N74-25968	US-PATENT-CLASS-106-46	c26	N72-28762
US-PATENT-CLASS-91-186	c05	N73-32014	US-PATENT-CLASS-106-48	c27	N75-27160
US-PATENT-CLASS-91-361	c15	N71-27754	US-PATENT-CLASS-106-52	c37	N74-21063
US-PATENT-CLASS-91-363A	c15	N73-13466	US-PATENT-CLASS-106-54	c27	N75-27160
US-PATENT-CLASS-91-390	c15	N71-27147	US-PATENT-CLASS-106-54	c27	N76-22377
US-PATENT-CLASS-91-390	c15	N71-27754	US-PATENT-CLASS-106-54	c27	N76-23426
US-PATENT-CLASS-91-448	c15	N71-27754	US-PATENT-CLASS-106-55	c17	N71-20941
US-PATENT-CLASS-91-448	c15	N73-13466	US-PATENT-CLASS-106-55	c18	N73-14584
US-PATENT-CLASS-91-461	c15	N71-27147	US-PATENT-CLASS-106-58	c18	N73-14584
US-PATENT-CLASS-92-49	c14	N73-13418	US-PATENT-CLASS-106-63	c18	N73-14584
US-PATENT-CLASS-92-94	c32	N70-41370	US-PATENT-CLASS-106-74	c18	N69-39979
US-PATENT-CLASS-93-1	c15	N70-33180	US-PATENT-CLASS-106-84	c18	N71-24183
US-PATENT-CLASS-95-1.1	c14	N72-18411	US-PATENT-CLASS-106-84	c18	N71-24184
US-PATENT-CLASS-95-1.1	c14	N73-26431	US-PATENT-CLASS-106-84	c18	N72-22566
US-PATENT-CLASS-95-11	c14	N71-18465	US-PATENT-CLASS-106-84	c18	N72-23581
US-PATENT-CLASS-95-11	c16	N71-33410	US-PATENT-CLASS-106-88	c18	N71-16124
US-PATENT-CLASS-95-11	c14	N73-32319	US-PATENT-CLASS-106-209	c05	N72-25120
US-PATENT-CLASS-95-11.5	c14	N73-32319	US-PATENT-CLASS-106-286	c18	N72-22566
US-PATENT-CLASS-95-11.5R	c14	N73-19419	US-PATENT-CLASS-106-287SB	c23	N75-14834
US-PATENT-CLASS-95-11R	c14	N73-19419	US-PATENT-CLASS-106-288B	c18	N72-22566
US-PATENT-CLASS-95-12	c14	N73-33361	US-PATENT-CLASS-106-292	c18	N72-17532
US-PATENT-CLASS-95-12.5	c31	N72-25842	US-PATENT-CLASS-106-292	c27	N77-30237
US-PATENT-CLASS-95-18	c14	N73-14427	US-PATENT-CLASS-106-296	c18	N71-26772
US-PATENT-CLASS-95-42	c14	N72-20380	US-PATENT-CLASS-106-296	c27	N77-30237
US-PATENT-CLASS-95-44	c14	N73-32322	US-PATENT-CLASS-106-299	c18	N72-17532
US-PATENT-CLASS-95-53	c14	N71-26474	US-PATENT-CLASS-106-299	c27	N77-30237
US-PATENT-CLASS-95-53EA	c15	N71-21060	US-PATENT-CLASS-106-306	c24	N76-24363
US-PATENT-CLASS-95-58	c33	N74-20861	US-PATENT-CLASS-108-136	c09	N75-12968
US-PATENT-CLASS-95-59	c14	N70-40273	US-PATENT-CLASS-112-402	c18	N71-26285
US-PATENT-CLASS-95-89R	c14	N73-14427	US-PATENT-CLASS-113-116	c15	N71-15597
US-PATENT-CLASS-96-36.2	c35	N74-15831	US-PATENT-CLASS-114-16.6	c37	N76-22540
US-PATENT-CLASS-96-36.2	c06	N72-21094	US-PATENT-CLASS-114-66.5	c12	N70-33305
US-PATENT-CLASS-96-38.3	c15	N72-25452	US-PATENT-CLASS-114-122	c02	N73-26006
US-PATENT-CLASS-96-49	c35	N74-26946	US-PATENT-CLASS-115-103.5	c51	N75-13502
US-PATENT-CLASS-96-79	c14	N71-17574	US-PATENT-CLASS-116-114.5	c35	N75-25122
US-PATENT-CLASS-96-90PC	c35	N74-26946	US-PATENT-CLASS-116-114AH	c14	N72-25411
US-PATENT-CLASS-98-39	c14	N72-22443	US-PATENT-CLASS-116-114AH	c35	N75-33367
US-PATENT-CLASS-99-80PS	c31	N74-27902	US-PATENT-CLASS-116-117	c14	N70-42074
US-PATENT-CLASS-100-8	c05	N72-33096	US-PATENT-CLASS-117-2R	c32	N74-27612
US-PATENT-CLASS-100-299	c33	N74-17928	US-PATENT-CLASS-117-6	c14	N71-20461
US-PATENT-CLASS-102-28EB	c15	N72-20446	US-PATENT-CLASS-117-8.5	c24	N75-33181
US-PATENT-CLASS-102-38.4	c28	N74-27425	US-PATENT-CLASS-117-16R	c15	N72-25452
US-PATENT-CLASS-102-49	c07	N72-25171	US-PATENT-CLASS-117-21	c18	N69-39895
US-PATENT-CLASS-102-49	c33	N70-36846	US-PATENT-CLASS-117-33.3	c70	N74-13436
US-PATENT-CLASS-102-49	c28	N70-38181	US-PATENT-CLASS-117-35R	c06	N73-13128
US-PATENT-CLASS-102-49	c03	N70-39930	US-PATENT-CLASS-117-37	c15	N72-25452
US-PATENT-CLASS-102-49	c15	N70-41679	US-PATENT-CLASS-117-38	c24	N75-33181
US-PATENT-CLASS-102-49	c28	N70-41967	US-PATENT-CLASS-117-45	c74	N74-20008
US-PATENT-CLASS-102-49	c31	N71-10582	US-PATENT-CLASS-117-46	c15	N71-16077
US-PATENT-CLASS-102-49	c15	N71-13789	US-PATENT-CLASS-117-46FS	c24	N75-33181
US-PATENT-CLASS-102-49	c31	N71-15692	US-PATENT-CLASS-117-47R	c15	N72-25452
US-PATENT-CLASS-102-49	c31	N71-17730	US-PATENT-CLASS-117-50	c15	N71-15610
US-PATENT-CLASS-102-49.3	c20	N77-17143	US-PATENT-CLASS-117-62	c15	N72-25447
US-PATENT-CLASS-102-49.5	c31	N71-15687	US-PATENT-CLASS-117-62	c15	N72-25452
US-PATENT-CLASS-102-49.5	c15	N71-22874	US-PATENT-CLASS-117-65.2	c18	N71-10772
US-PATENT-CLASS-102-49.5	c31	N71-23008	US-PATENT-CLASS-117-66	c15	N73-32360
US-PATENT-CLASS-102-49.5	c31	N73-14853	US-PATENT-CLASS-117-69	c18	N70-36400
US-PATENT-CLASS-102-49.7	c28	N73-24784	US-PATENT-CLASS-117-69	c15	N71-16075
US-PATENT-CLASS-102-49.8	c28	N73-24784	US-PATENT-CLASS-117-72	c35	N75-25122

NUMBER INDEX

US-PATENT-CLASS-117-93.1GD	c25 N75-12087	US-PATENT-CLASS-123-119E	c37 N76-18457
US-PATENT-CLASS-117-93.3	c15 N72-25452	US-PATENT-CLASS-123-120	c37 N76-18457
US-PATENT-CLASS-117-93.3	c37 N75-15592	US-PATENT-CLASS-123-121	c37 N76-18457
US-PATENT-CLASS-117-93.16D	c15 N72-25447	US-PATENT-CLASS-123-122AB	c28 N72-22772
US-PATENT-CLASS-117-95	c24 N74-19769	US-PATENT-CLASS-123-122AB	c37 N77-31497
US-PATENT-CLASS-117-95	c36 N75-15029	US-PATENT-CLASS-123-122E	c07 N77-23106
US-PATENT-CLASS-117-97	c36 N75-15029	US-PATENT-CLASS-123-148CB	c33 N77-28385
US-PATENT-CLASS-117-104	c18 N71-26100	US-PATENT-CLASS-123-148E	c33 N77-28385
US-PATENT-CLASS-117-105	c15 N73-32360	US-PATENT-CLASS-124-1	c75 N76-17951
US-PATENT-CLASS-117-105.2	c37 N74-11301	US-PATENT-CLASS-124-6	c09 N77-19076
US-PATENT-CLASS-117-105.2	c24 N75-33181	US-PATENT-CLASS-124-11R	c75 N76-17951
US-PATENT-CLASS-117-105.5	c15 N73-32360	US-PATENT-CLASS-125-1	c46 N74-23069
US-PATENT-CLASS-117-106	c33 N71-14032	US-PATENT-CLASS-125-3	c46 N74-23069
US-PATENT-CLASS-117-106A	c70 N74-13436	US-PATENT-CLASS-126-263	c44 N77-32581
US-PATENT-CLASS-117-106A	c37 N75-15592	US-PATENT-CLASS-126-270	c09 N70-40234
US-PATENT-CLASS-117-106A	c25 N75-26043	US-PATENT-CLASS-126-270	c03 N70-41580
US-PATENT-CLASS-117-107	c15 N72-25447	US-PATENT-CLASS-126-270	c34 N74-23039
US-PATENT-CLASS-117-107.2	c25 N75-26043	US-PATENT-CLASS-126-270	c44 N76-14595
US-PATENT-CLASS-117-119	c18 N71-16105	US-PATENT-CLASS-126-270	c44 N76-23675
US-PATENT-CLASS-117-124C	c15 N72-25452	US-PATENT-CLASS-126-270	c44 N76-24696
US-PATENT-CLASS-117-124P	c23 N75-14834	US-PATENT-CLASS-126-270	c35 N77-20401
US-PATENT-CLASS-117-126GB	c37 N75-26371	US-PATENT-CLASS-126-270	c44 N77-32582
US-PATENT-CLASS-117-126GB	c27 N74-23125	US-PATENT-CLASS-126-271	c44 N75-32581
US-PATENT-CLASS-117-126R	c37 N75-26371	US-PATENT-CLASS-126-271	c44 N76-14602
US-PATENT-CLASS-117-129	c37 N74-21063	US-PATENT-CLASS-126-271	c44 N76-22657
US-PATENT-CLASS-117-129	c27 N75-27160	US-PATENT-CLASS-126-271	c44 N76-24696
US-PATENT-CLASS-117-130R	c15 N73-32360	US-PATENT-CLASS-126-271	c35 N77-20401
US-PATENT-CLASS-117-130Z	c06 N72-25150	US-PATENT-CLASS-126-271	c44 N77-32582
US-PATENT-CLASS-117-132B	c27 N74-23125	US-PATENT-CLASS-128.2.06E	c05 N75-24716
US-PATENT-CLASS-117-135.5	c23 N75-14834	US-PATENT-CLASS-128-DIG.4	c05 N72-27103
US-PATENT-CLASS-117-138.8R	c15 N73-32360	US-PATENT-CLASS-128-DIG.4	c05 N75-24716
US-PATENT-CLASS-117-151	c15 N73-32360	US-PATENT-CLASS-128-DIG.4	c35 N76-24525
US-PATENT-CLASS-117-152	c15 N72-25452	US-PATENT-CLASS-128-DIG.4	c52 N77-28717
US-PATENT-CLASS-117-160R	c15 N73-32360	US-PATENT-CLASS-128-DIG.12	c37 N77-28487
US-PATENT-CLASS-117-161	c06 N72-25150	US-PATENT-CLASS-128-DIG.20	c52 N76-19785
US-PATENT-CLASS-117-161P	c06 N73-27980	US-PATENT-CLASS-128-1	c05 N70-41819
US-PATENT-CLASS-117-161UA	c25 N75-12087	US-PATENT-CLASS-128-1A	c05 N73-32012
US-PATENT-CLASS-117-161UN	c06 N73-27980	US-PATENT-CLASS-128-1R	c52 N77-25772
US-PATENT-CLASS-117-161UN	c27 N74-23125	US-PATENT-CLASS-128-1R	c52 N77-28716
US-PATENT-CLASS-117-161UN	c25 N75-12087	US-PATENT-CLASS-128-2	c05 N73-27062
US-PATENT-CLASS-117-161UZ	c25 N75-12087	US-PATENT-CLASS-128-2.1	c05 N71-11193
US-PATENT-CLASS-117-200	c09 N72-25259	US-PATENT-CLASS-128-2.1	c05 N71-12346
US-PATENT-CLASS-117-201	c15 N69-21460	US-PATENT-CLASS-128-2.1	c05 N71-24729
US-PATENT-CLASS-117-201	c18 N71-16046	US-PATENT-CLASS-128-2.1	c09 N71-26002
US-PATENT-CLASS-117-201	c03 N72-24037	US-PATENT-CLASS-128-2.1	c05 N72-25120
US-PATENT-CLASS-117-201	c25 N75-26043	US-PATENT-CLASS-128-2.1A	c09 N72-17153
US-PATENT-CLASS-117-211	c15 N72-25447	US-PATENT-CLASS-128-2.1A	c09 N72-22202
US-PATENT-CLASS-117-212	c09 N71-20705	US-PATENT-CLASS-128-2.1A	c52 N74-26625
US-PATENT-CLASS-117-212	c15 N71-29032	US-PATENT-CLASS-128-2.1A	c52 N76-14757
US-PATENT-CLASS-117-212	c26 N72-28762	US-PATENT-CLASS-128-2.1A	c52 N76-29894
US-PATENT-CLASS-117-217	c15 N72-25447	US-PATENT-CLASS-128-2.1E	c05 N72-27103
US-PATENT-CLASS-117-217	c26 N72-28762	US-PATENT-CLASS-128-2.1E	c35 N76-24525
US-PATENT-CLASS-117-224	c15 N71-28582	US-PATENT-CLASS-128-2.1E	c52 N77-28717
US-PATENT-CLASS-117-228	c06 N73-27980	US-PATENT-CLASS-128-2.1R	c05 N73-26072
US-PATENT-CLASS-118-6	c51 N77-27677	US-PATENT-CLASS-128-2.1Z	c35 N76-24525
US-PATENT-CLASS-118-7	c51 N77-27677	US-PATENT-CLASS-128-2.05	c05 N70-41329
US-PATENT-CLASS-118-9	c51 N77-27677	US-PATENT-CLASS-128-2.05	c04 N71-23185
US-PATENT-CLASS-118-11	c15 N71-17647	US-PATENT-CLASS-128-2.05	c05 N71-27234
US-PATENT-CLASS-118-43	c25 N75-29192	US-PATENT-CLASS-128-2.05A	c52 N74-26626
US-PATENT-CLASS-118-48	c25 N75-26043	US-PATENT-CLASS-128-2.05A	c54 N75-13531
US-PATENT-CLASS-118-49.1	c15 N72-32487	US-PATENT-CLASS-128-2.05E	c52 N74-27566
US-PATENT-CLASS-118-49.1	c31 N75-12161	US-PATENT-CLASS-128-2.05E	c52 N76-29896
US-PATENT-CLASS-118-49.1	c25 N75-26043	US-PATENT-CLASS-128-2.05P	c14 N73-32326
US-PATENT-CLASS-118-49.5	c09 N71-26701	US-PATENT-CLASS-128-2.05P	c54 N75-13531
US-PATENT-CLASS-118-308	c17 N71-24911	US-PATENT-CLASS-128-2.05R	c05 N73-27941
US-PATENT-CLASS-118-313	c51 N77-27677	US-PATENT-CLASS-128-2.05R	c52 N76-29895
US-PATENT-CLASS-119-15	c11 N71-22875	US-PATENT-CLASS-128-2.05S	c52 N74-26626
US-PATENT-CLASS-119-51.5	c51 N74-15778	US-PATENT-CLASS-128-2.05T	c52 N74-12778
US-PATENT-CLASS-119-51.13	c51 N74-15778	US-PATENT-CLASS-128-2.05V	c35 N76-24525
US-PATENT-CLASS-119-51R	c51 N74-15778	US-PATENT-CLASS-128-2.05Z	c54 N75-27760
US-PATENT-CLASS-119-52AF	c51 N74-15778	US-PATENT-CLASS-128-2.06	c05 N69-21925
US-PATENT-CLASS-119-54	c51 N74-15778	US-PATENT-CLASS-128-2.06	c05 N71-22896
US-PATENT-CLASS-119-96	c05 N71-28619	US-PATENT-CLASS-128-2.06	c09 N71-24618
US-PATENT-CLASS-121-38	c15 N70-35409	US-PATENT-CLASS-128-2.06	c05 N71-26293
US-PATENT-CLASS-121-38	c02 N71-29128	US-PATENT-CLASS-128-2.06B	c05 N75-54716
US-PATENT-CLASS-122-32	c33 N72-20915	US-PATENT-CLASS-128-2.06E	c52 N76-29896
US-PATENT-CLASS-123-DIG.8	c37 N77-31497	US-PATENT-CLASS-128-2.06F	c52 N74-12778
US-PATENT-CLASS-123-DIG.12	c37 N76-18457	US-PATENT-CLASS-128-2.06R	c05 N73-27941
US-PATENT-CLASS-123-1A	c44 N76-29700	US-PATENT-CLASS-128-2.06R	c52 N76-14757
US-PATENT-CLASS-123-3	c44 N76-18642	US-PATENT-CLASS-128-2.07	c05 N73-32015
US-PATENT-CLASS-123-3	c44 N76-29700	US-PATENT-CLASS-128-2.07	c52 N74-20728
US-PATENT-CLASS-123-3	c44 N77-10636	US-PATENT-CLASS-128-2.08	c05 N69-21473
US-PATENT-CLASS-123-3	c37 N77-31497	US-PATENT-CLASS-128-2.08	c05 N73-32015
US-PATENT-CLASS-123-37	c37 N77-31497	US-PATENT-CLASS-128-2.08	c52 N74-20728
US-PATENT-CLASS-123-41.33	c07 N77-23106	US-PATENT-CLASS-128-2P	c54 N76-14804
US-PATENT-CLASS-123-59E	c37 N77-31497	US-PATENT-CLASS-128-2H	c52 N76-14757
US-PATENT-CLASS-123-89A	c37 N76-18457	US-PATENT-CLASS-128-2H	c52 N76-29894
US-PATENT-CLASS-123-102	c11 N72-20244	US-PATENT-CLASS-128-2H	c52 N77-10780
US-PATENT-CLASS-123-119A	c37 N77-31497	US-PATENT-CLASS-128-2H	c52 N77-14736

NUMBER INDEX

US-PATENT-CLASS-128-2H	.....	c05	N72-25122	US-PATENT-CLASS-136-89	.....	c31	N72-22874
US-PATENT-CLASS-128-2N	.....	c05	N73-13114	US-PATENT-CLASS-136-89	.....	c03	N72-24037
US-PATENT-CLASS-128-2P	.....	c52	N76-29894	US-PATENT-CLASS-136-89	.....	c09	N72-25259
US-PATENT-CLASS-128-2R	.....	c09	N72-22202	US-PATENT-CLASS-136-89	.....	c03	N72-27053
US-PATENT-CLASS-128-2S	.....	c52	N74-10975	US-PATENT-CLASS-136-89	.....	c09	N73-32109
US-PATENT-CLASS-128-2S	.....	c52	N74-27864	US-PATENT-CLASS-136-89	.....	c44	N74-14784
US-PATENT-CLASS-128-2S	.....	c33	N75-31329	US-PATENT-CLASS-136-89	.....	c44	N76-14600
US-PATENT-CLASS-128-2S	.....	c33	N76-19338	US-PATENT-CLASS-136-89	.....	c44	N76-28635
US-PATENT-CLASS-128-2S	.....	c52	N76-29895	US-PATENT-CLASS-136-89	.....	c44	N76-31666
US-PATENT-CLASS-128-2S	.....	c52	N76-29896	US-PATENT-CLASS-136-89	.....	c44	N77-10635
US-PATENT-CLASS-128-2V	.....	c52	N74-20726	US-PATENT-CLASS-136-89	.....	c44	N77-14580
US-PATENT-CLASS-128-2V	.....	c35	N75-12271	US-PATENT-CLASS-136-89	.....	c44	N77-19571
US-PATENT-CLASS-128-2V	.....	c54	N75-27760	US-PATENT-CLASS-136-89-AC	.....	c44	N77-31601
US-PATENT-CLASS-128-24	.....	c05	N71-24738	US-PATENT-CLASS-136-89P	.....	c44	N77-31601
US-PATENT-CLASS-128-24A	.....	c05	N73-27062	US-PATENT-CLASS-136-90	.....	c44	N76-14601
US-PATENT-CLASS-128-24A	.....	c54	N75-27760	US-PATENT-CLASS-136-100R	.....	c03	N72-20034
US-PATENT-CLASS-128-25	.....	c05	N71-24738	US-PATENT-CLASS-136-114	.....	c44	N76-14601
US-PATENT-CLASS-128-25R	.....	c37	N74-18127	US-PATENT-CLASS-136-132	.....	c03	N71-11053
US-PATENT-CLASS-128-26	.....	c52	N76-19785	US-PATENT-CLASS-136-132	.....	c03	N71-22974
US-PATENT-CLASS-128-29	.....	c05	N70-39922	US-PATENT-CLASS-136-133	.....	c15	N69-24320
US-PATENT-CLASS-128-142.2	.....	c54	N76-24900	US-PATENT-CLASS-136-133	.....	c03	N71-23006
US-PATENT-CLASS-128-142.5	.....	c05	N71-11190	US-PATENT-CLASS-136-133	.....	c03	N72-15986
US-PATENT-CLASS-128-142.5	.....	c05	N71-11203	US-PATENT-CLASS-136-135	.....	c03	N72-15986
US-PATENT-CLASS-128-142.5	.....	c05	N71-17599	US-PATENT-CLASS-136-143	.....	c44	N76-29699
US-PATENT-CLASS-128-142.5	.....	c05	N72-20096	US-PATENT-CLASS-136-146	.....	c03	N69-21337
US-PATENT-CLASS-128-142.5	.....	c05	N73-25125	US-PATENT-CLASS-136-146	.....	c24	N76-14204
US-PATENT-CLASS-128-145.8	.....	c54	N75-27761	US-PATENT-CLASS-136-148	.....	c24	N76-14204
US-PATENT-CLASS-128-191R	.....	c25	N74-12813	US-PATENT-CLASS-136-162	.....	c44	N76-14601
US-PATENT-CLASS-128-203	.....	c54	N76-24900	US-PATENT-CLASS-136-166	.....	c03	N71-23336
US-PATENT-CLASS-128-206P	.....	c14	N73-28473	US-PATENT-CLASS-136-166	.....	c03	N72-20032
US-PATENT-CLASS-128-214E	.....	c52	N74-22771	US-PATENT-CLASS-136-170	.....	c03	N71-11051
US-PATENT-CLASS-128-214F	.....	c37	N77-28487	US-PATENT-CLASS-136-175	.....	c03	N72-20034
US-PATENT-CLASS-128-230	.....	c52	N75-33640	US-PATENT-CLASS-136-179	.....	c03	N70-41864
US-PATENT-CLASS-128-272	.....	c15	N71-24835	US-PATENT-CLASS-136-182	.....	c03	N71-10728
US-PATENT-CLASS-128-275	.....	c15	N71-24835	US-PATENT-CLASS-136-182	.....	c03	N71-20407
US-PATENT-CLASS-128-283	.....	c05	N69-23192	US-PATENT-CLASS-136-182	.....	c03	N71-20491
US-PATENT-CLASS-128-295	.....	c05	N72-22093	US-PATENT-CLASS-136-182	.....	c44	N72-27519
US-PATENT-CLASS-128-303R	.....	c52	N77-28716	US-PATENT-CLASS-136-182	.....	c44	N76-14601
US-PATENT-CLASS-128-305	.....	c05	N73-27062	US-PATENT-CLASS-136-202	.....	c09	N72-12136
US-PATENT-CLASS-128-305	.....	c52	N75-33640	US-PATENT-CLASS-136-202	.....	c03	N72-26031
US-PATENT-CLASS-128-379	.....	c52	N77-14736	US-PATENT-CLASS-136-202	.....	c44	N76-16612
US-PATENT-CLASS-128-400	.....	c52	N77-14736	US-PATENT-CLASS-136-202	.....	c35	N77-32454
US-PATENT-CLASS-128-402	.....	c05	N72-20096	US-PATENT-CLASS-136-206	.....	c03	N72-11062
US-PATENT-CLASS-128-402	.....	c52	N77-14736	US-PATENT-CLASS-136-206	.....	c09	N72-12136
US-PATENT-CLASS-128-410	.....	c52	N77-28717	US-PATENT-CLASS-136-206	.....	c44	N76-14595
US-PATENT-CLASS-128-417	.....	c05	N72-25120	US-PATENT-CLASS-136-206	.....	c44	N76-31666
US-PATENT-CLASS-128-417	.....	c05	N72-27103	US-PATENT-CLASS-136-210	.....	c44	N76-16612
US-PATENT-CLASS-128-418	.....	c52	N76-29896	US-PATENT-CLASS-136-211	.....	c35	N76-15434
US-PATENT-CLASS-128-418	.....	c52	N77-14738	US-PATENT-CLASS-136-212	.....	c35	N76-15434
US-PATENT-CLASS-128-419P	.....	c52	N76-29896	US-PATENT-CLASS-136-213	.....	c14	N69-27459
US-PATENT-CLASS-129-16.7	.....	c08	N71-15908	US-PATENT-CLASS-136-213	.....	c34	N74-27861
US-PATENT-CLASS-134-21	.....	c37	N76-18456	US-PATENT-CLASS-136-224	.....	c14	N73-12447
US-PATENT-CLASS-134-37	.....	c37	N76-18456	US-PATENT-CLASS-136-225	.....	c14	N73-24472
US-PATENT-CLASS-135-1	.....	c32	N70-36536	US-PATENT-CLASS-136-225	.....	c35	N76-15434
US-PATENT-CLASS-136-6	.....	c03	N71-26084	US-PATENT-CLASS-136-227	.....	c09	N72-12136
US-PATENT-CLASS-136-6	.....	c03	N72-15986	US-PATENT-CLASS-136-228	.....	c33	N71-15568
US-PATENT-CLASS-136-61P	.....	c44	N76-18643	US-PATENT-CLASS-136-230	.....	c14	N71-23039
US-PATENT-CLASS-136-20	.....	c44	N74-19693	US-PATENT-CLASS-136-230	.....	c34	N74-27861
US-PATENT-CLASS-136-24	.....	c09	N73-32108	US-PATENT-CLASS-136-232	.....	c35	N77-14409
US-PATENT-CLASS-136-28	.....	c03	N71-10608	US-PATENT-CLASS-136-233	.....	c14	N72-27410
US-PATENT-CLASS-136-30	.....	c44	N74-19693	US-PATENT-CLASS-136-233	.....	c14	N73-13417
US-PATENT-CLASS-136-30	.....	c44	N76-18643	US-PATENT-CLASS-136-233	.....	c34	N74-27861
US-PATENT-CLASS-136-30	.....	c44	N76-29699	US-PATENT-CLASS-136-233	.....	c35	N77-14409
US-PATENT-CLASS-136-36	.....	c44	N74-19692	US-PATENT-CLASS-136-236R	.....	c35	N77-32454
US-PATENT-CLASS-136-79	.....	c03	N72-20032	US-PATENT-CLASS-136-240	.....	c35	N77-32454
US-PATENT-CLASS-136-81	.....	c03	N72-20032	US-PATENT-CLASS-137-DIG.9	.....	c54	N76-24900
US-PATENT-CLASS-136-83	.....	c03	N71-28579	US-PATENT-CLASS-137-1	.....	c12	N70-38997
US-PATENT-CLASS-136-83R	.....	c03	N72-20034	US-PATENT-CLASS-137-1	.....	c15	N73-27406
US-PATENT-CLASS-136-86	.....	c44	N76-18641	US-PATENT-CLASS-137-13	.....	c15	N71-15967
US-PATENT-CLASS-136-86	.....	c03	N71-11052	US-PATENT-CLASS-137-13	.....	c15	N72-33477
US-PATENT-CLASS-136-86	.....	c03	N71-20904	US-PATENT-CLASS-137-15.1	.....	c02	N74-20646
US-PATENT-CLASS-136-86	.....	c15	N71-23022	US-PATENT-CLASS-137-15.1	.....	c07	N74-31270
US-PATENT-CLASS-136-86	.....	c03	N71-29044	US-PATENT-CLASS-137-15.1	.....	c07	N75-24736
US-PATENT-CLASS-136-86A	.....	c44	N76-27664	US-PATENT-CLASS-137-15.1	.....	c07	N77-18154
US-PATENT-CLASS-136-86S	.....	c44	N76-18641	US-PATENT-CLASS-137-15.2	.....	c02	N74-20646
US-PATENT-CLASS-136-89	.....	c03	N69-24267	US-PATENT-CLASS-137-15.2	.....	c35	N76-14431
US-PATENT-CLASS-136-89	.....	c03	N71-11049	US-PATENT-CLASS-137-81	.....	c05	N72-20097
US-PATENT-CLASS-136-89	.....	c03	N71-11050	US-PATENT-CLASS-137-81	.....	c14	N73-13418
US-PATENT-CLASS-136-89	.....	c03	N71-11056	US-PATENT-CLASS-137-81.5	.....	c12	N69-21466
US-PATENT-CLASS-136-89	.....	c03	N71-18698	US-PATENT-CLASS-137-81.5	.....	c15	N71-15609
US-PATENT-CLASS-136-89	.....	c03	N71-19545	US-PATENT-CLASS-137-81.5	.....	c12	N71-17578
US-PATENT-CLASS-136-89	.....	c03	N71-20492	US-PATENT-CLASS-137-81.5	.....	c12	N71-17579
US-PATENT-CLASS-136-89	.....	c03	N71-20895	US-PATENT-CLASS-137-81.5	.....	c10	N71-25899
US-PATENT-CLASS-136-89	.....	c26	N71-23043	US-PATENT-CLASS-137-81.5	.....	c12	N71-27332
US-PATENT-CLASS-136-89	.....	c03	N71-23187	US-PATENT-CLASS-137-81.5	.....	c12	N71-28141
US-PATENT-CLASS-136-89	.....	c03	N71-23449	US-PATENT-CLASS-137-81.5	.....	c28	N72-22772
US-PATENT-CLASS-136-89	.....	c03	N71-33409	US-PATENT-CLASS-137-81.5	.....	c15	N72-33477
US-PATENT-CLASS-136-89	.....	c03	N72-20031	US-PATENT-CLASS-137-81.5	.....	c15	N73-13462
US-PATENT-CLASS-136-89	.....	c03	N72-22042	US-PATENT-CLASS-137-81.5	.....	c28	N73-13773

NUMBER INDEX

US-PATENT-CLASS-137-101	c07	N77-23106	US-PATENT-CLASS-148-175	c44	N76-28635
US-PATENT-CLASS-137-110	c54	N76-24900	US-PATENT-CLASS-148-187	c26	N72-17820
US-PATENT-CLASS-137-154	c15	N73-27406	US-PATENT-CLASS-148-187	c14	N72-28438
US-PATENT-CLASS-137-197	c15	N70-41646	US-PATENT-CLASS-148-188	c24	N71-10560
US-PATENT-CLASS-137-207	c34	N77-30399	US-PATENT-CLASS-148-188	c09	N71-12513
US-PATENT-CLASS-137-209	c34	N77-30399	US-PATENT-CLASS-149-1	c23	N71-16212
US-PATENT-CLASS-137-340	c15	N70-34817	US-PATENT-CLASS-149-1	c06	N73-30097
US-PATENT-CLASS-137-340	c15	N70-35087	US-PATENT-CLASS-149-2	c12	N70-40124
US-PATENT-CLASS-137-341	c12	N71-17661	US-PATENT-CLASS-149-17	c28	N74-33209
US-PATENT-CLASS-137-397	c15	N73-26472	US-PATENT-CLASS-149-19	c27	N71-14090
US-PATENT-CLASS-137-469	c05	N72-20097	US-PATENT-CLASS-149-19	c27	N72-25699
US-PATENT-CLASS-137-487.5	c14	N73-13418	US-PATENT-CLASS-149-19	c27	N73-16764
US-PATENT-CLASS-137-491	c15	N69-21924	US-PATENT-CLASS-149-20	c27	N72-25699
US-PATENT-CLASS-137-495	c15	N70-38603	US-PATENT-CLASS-149-36	c27	N72-25699
US-PATENT-CLASS-137-496	c15	N71-22706	US-PATENT-CLASS-149-36	c27	N73-16764
US-PATENT-CLASS-137-505.12	c14	N71-18625	US-PATENT-CLASS-149-36	c06	N73-30097
US-PATENT-CLASS-137-505.38	c37	N75-15050	US-PATENT-CLASS-149-36	c24	N76-14203
US-PATENT-CLASS-137-505.42	c37	N75-15050	US-PATENT-CLASS-149-60	c28	N74-33209
US-PATENT-CLASS-137-515.3	c37	N76-14463	US-PATENT-CLASS-149-76	c28	N74-33209
US-PATENT-CLASS-137-516.27	c15	N73-30459	US-PATENT-CLASS-149-92	c27	N72-25699
US-PATENT-CLASS-137-535	c15	N73-30459	US-PATENT-CLASS-149-109	c27	N70-41897
US-PATENT-CLASS-137-535	c05	N73-32014	US-PATENT-CLASS-152-11	c31	N71-18611
US-PATENT-CLASS-137-538	c05	N73-25125	US-PATENT-CLASS-152-225	c15	N71-27091
US-PATENT-CLASS-137-539	c15	N70-41811	US-PATENT-CLASS-152-250	c15	N71-27091
US-PATENT-CLASS-137-550	c37	N76-14463	US-PATENT-CLASS-156-DIG.62	c76	N77-32919
US-PATENT-CLASS-137-554	c09	N71-23191	US-PATENT-CLASS-156-3	c17	N71-16044
US-PATENT-CLASS-137-559	c11	N73-12265	US-PATENT-CLASS-156-3	c15	N71-21404
US-PATENT-CLASS-137-582	c32	N71-16103	US-PATENT-CLASS-156-3	c15	N71-24047
US-PATENT-CLASS-137-582	c32	N71-16106	US-PATENT-CLASS-156-3	c06	N72-21094
US-PATENT-CLASS-137-582	c15	N71-19569	US-PATENT-CLASS-156-7	c74	N75-12732
US-PATENT-CLASS-137-582	c15	N73-26472	US-PATENT-CLASS-156-16	c74	N75-12732
US-PATENT-CLASS-137-594	c12	N71-18615	US-PATENT-CLASS-156-18	c26	N73-26752
US-PATENT-CLASS-137-604	c15	N73-27406	US-PATENT-CLASS-156-18	c74	N75-12732
US-PATENT-CLASS-137-608	c15	N73-13462	US-PATENT-CLASS-156-60	c15	N71-22713
US-PATENT-CLASS-137-614	c15	N70-36492	US-PATENT-CLASS-156-66	c15	N72-11392
US-PATENT-CLASS-137-615	c12	N71-16031	US-PATENT-CLASS-156-84	c15	N72-16330
US-PATENT-CLASS-137-624.14	c03	N69-21469	US-PATENT-CLASS-156-86	c15	N72-16330
US-PATENT-CLASS-137-625.5	c15	N71-23051	US-PATENT-CLASS-156-89	c37	N75-15992
US-PATENT-CLASS-137-625.65	c15	N70-36908	US-PATENT-CLASS-156-94	c32	N74-27612
US-PATENT-CLASS-137-628	c37	N74-21065	US-PATENT-CLASS-156-94	c24	N74-30001
US-PATENT-CLASS-137-819	c33	N74-11050	US-PATENT-CLASS-156-99	c37	N75-15992
US-PATENT-CLASS-137-833	c33	N74-11050	US-PATENT-CLASS-156-172	c15	N71-17651
US-PATENT-CLASS-137-840	c33	N74-11050	US-PATENT-CLASS-156-212	c03	N71-26726
US-PATENT-CLASS-138-4	c15	N71-18580	US-PATENT-CLASS-156-218	c54	N74-32546
US-PATENT-CLASS-138-42	c15	N71-15608	US-PATENT-CLASS-156-229	c24	N77-28225
US-PATENT-CLASS-138-43	c15	N71-19213	US-PATENT-CLASS-156-242	c15	N69-24322
US-PATENT-CLASS-138-45	c15	N71-18580	US-PATENT-CLASS-156-242	c37	N76-24575
US-PATENT-CLASS-138-45	c15	N73-13462	US-PATENT-CLASS-156-245	c31	N74-18089
US-PATENT-CLASS-138-46	c12	N71-18615	US-PATENT-CLASS-156-247	c31	N74-18089
US-PATENT-CLASS-138-113	c34	N75-12222	US-PATENT-CLASS-156-250	c03	N72-25019
US-PATENT-CLASS-138-114	c34	N75-12222	US-PATENT-CLASS-156-264	c05	N72-25121
US-PATENT-CLASS-138-119	c32	N70-41579	US-PATENT-CLASS-156-285	c15	N71-23052
US-PATENT-CLASS-138-148	c34	N75-12222	US-PATENT-CLASS-156-285	c18	N73-30532
US-PATENT-CLASS-138-178	c15	N72-20445	US-PATENT-CLASS-156-285	c31	N74-18089
US-PATENT-CLASS-139-425R	c28	N72-11708	US-PATENT-CLASS-156-285	c24	N74-27035
US-PATENT-CLASS-140-105	c15	N72-12408	US-PATENT-CLASS-156-286	c37	N76-21554
US-PATENT-CLASS-140-123	c15	N71-15918	US-PATENT-CLASS-156-286	c37	N76-24575
US-PATENT-CLASS-140-124	c15	N71-10809	US-PATENT-CLASS-156-308	c05	N72-25121
US-PATENT-CLASS-141-5	c33	N71-20834	US-PATENT-CLASS-156-309	c31	N74-18089
US-PATENT-CLASS-141-23	c15	N72-21465	US-PATENT-CLASS-156-320	c15	N72-11392
US-PATENT-CLASS-141-91	c12	N71-21089	US-PATENT-CLASS-156-331	c37	N74-18126
US-PATENT-CLASS-141-258	c14	N71-27005	US-PATENT-CLASS-156-345	c15	N70-42033
US-PATENT-CLASS-148-1.5	c26	N71-10607	US-PATENT-CLASS-156-382	c37	N76-21554
US-PATENT-CLASS-148-1.5	c26	N71-23654	US-PATENT-CLASS-156-510	c15	N71-17687
US-PATENT-CLASS-148-1.5	c76	N74-20329	US-PATENT-CLASS-156-510	c03	N72-25019
US-PATENT-CLASS-148-2	c26	N77-20201	US-PATENT-CLASS-156-545	c15	N71-24164
US-PATENT-CLASS-148-6	c18	N71-29040	US-PATENT-CLASS-156-556	c37	N76-21554
US-PATENT-CLASS-148-6.3	c17	N71-33408	US-PATENT-CLASS-156-601	c76	N77-32919
US-PATENT-CLASS-148-6.11	c15	N71-24875	US-PATENT-CLASS-156-610	c76	N76-25049
US-PATENT-CLASS-148-6.16	c18	N71-23047	US-PATENT-CLASS-156-612	c76	N76-25049
US-PATENT-CLASS-148-6.20	c17	N71-23828	US-PATENT-CLASS-156-612	c44	N76-28635
US-PATENT-CLASS-148-11.5R	c15	N73-13465	US-PATENT-CLASS-156-613	c76	N76-25049
US-PATENT-CLASS-148-12.7R	c26	N77-20201	US-PATENT-CLASS-156-613	c44	N76-28635
US-PATENT-CLASS-148-13	c14	N71-25892	US-PATENT-CLASS-156-614	c44	N76-28635
US-PATENT-CLASS-148-20.3	c26	N77-20201	US-PATENT-CLASS-156-619	c76	N77-32919
US-PATENT-CLASS-148-32	c26	N77-32279	US-PATENT-CLASS-156-620	c76	N77-32919
US-PATENT-CLASS-148-32.5	c17	N72-22535	US-PATENT-CLASS-156-645	c27	N77-32308
US-PATENT-CLASS-148-32.5	c26	N77-20201	US-PATENT-CLASS-156-663	c27	N77-32308
US-PATENT-CLASS-148-32.5	c26	N77-32280	US-PATENT-CLASS-161-7	c18	N72-25540
US-PATENT-CLASS-148-126	c17	N71-24142	US-PATENT-CLASS-161-7	c18	N72-25541
US-PATENT-CLASS-148-126	c18	N71-26153	US-PATENT-CLASS-161-42	c37	N74-18126
US-PATENT-CLASS-148-126	c18	N71-28729	US-PATENT-CLASS-161-43	c37	N74-18126
US-PATENT-CLASS-148-126	c26	N74-10521	US-PATENT-CLASS-161-67	c33	N72-17947
US-PATENT-CLASS-148-127	c26	N75-29236	US-PATENT-CLASS-161-68	c18	N71-21651
US-PATENT-CLASS-148-162	c26	N77-20201	US-PATENT-CLASS-161-68	c18	N72-25540
US-PATENT-CLASS-148-174	c26	N71-29156	US-PATENT-CLASS-161-68	c18	N72-25541
US-PATENT-CLASS-148-174	c44	N76-28635	US-PATENT-CLASS-161-69	c33	N71-24858
US-PATENT-CLASS-148-175	c25	N75-26043	US-PATENT-CLASS-161-89	c17	N71-28747
US-PATENT-CLASS-148-175	c76	N76-25049	US-PATENT-CLASS-161-92	c37	N75-26371

NUMBER INDEX

US-PATENT-CLASS-161-93	c18 N73-12604	US-PATENT-CLASS-174-28	c07 N71-27191
US-PATENT-CLASS-161-93	c37 N74-18126	US-PATENT-CLASS-174-28	c33 N74-27683
US-PATENT-CLASS-161-93	c37 N75-26371	US-PATENT-CLASS-174-35	c07 N71-19436
US-PATENT-CLASS-161-115	c18 N70-41583	US-PATENT-CLASS-174-36	c09 N72-22198
US-PATENT-CLASS-161-116	c37 N74-23064	US-PATENT-CLASS-174-52S	c15 N73-14469
US-PATENT-CLASS-161-127	c18 N72-25540	US-PATENT-CLASS-174-68.5	c15 N70-41960
US-PATENT-CLASS-161-127	c18 N72-25541	US-PATENT-CLASS-174-69	c33 N74-22865
US-PATENT-CLASS-161-161	c33 N71-25351	US-PATENT-CLASS-174-70R	c33 N74-22865
US-PATENT-CLASS-161-182	c15 N69-39735	US-PATENT-CLASS-174-72	c03 N69-21539
US-PATENT-CLASS-161-182	c37 N74-18126	US-PATENT-CLASS-174-84	c15 N72-17455
US-PATENT-CLASS-161-189	c23 N71-15978	US-PATENT-CLASS-174-106R	c09 N72-22198
US-PATENT-CLASS-161-192	c37 N74-18126	US-PATENT-CLASS-174-110.3	c14 N71-27186
US-PATENT-CLASS-161-156	c37 N74-21063	US-PATENT-CLASS-174-111	c33 N74-27683
US-PATENT-CLASS-161-214	c06 N73-27980	US-PATENT-CLASS-174-115	c09 N70-38201
US-PATENT-CLASS-161-227	c06 N73-27980	US-PATENT-CLASS-174-117FP	c09 N72-22198
US-PATENT-CLASS-162-102	c24 N76-14204	US-PATENT-CLASS-174-126CP	c26 N73-32571
US-PATENT-CLASS-162-153	c24 N76-14204	US-PATENT-CLASS-174-145	c33 N76-16332
US-PATENT-CLASS-162-222	c24 N76-14204	US-PATENT-CLASS-174-148	c33 N76-16332
US-PATENT-CLASS-162-228	c24 N76-14204	US-PATENT-CLASS-175-26	c15 N73-32362
US-PATENT-CLASS-164-60	c24 N77-27187	US-PATENT-CLASS-175-310	c15 N70-42034
US-PATENT-CLASS-164-132	c37 N76-23570	US-PATENT-CLASS-175-323	c14 N69-21923
US-PATENT-CLASS-165-1	c09 N70-41717	US-PATENT-CLASS-176-3	c75 N75-13625
US-PATENT-CLASS-165-1	c34 N75-12222	US-PATENT-CLASS-176-11	c24 N72-33681
US-PATENT-CLASS-165-2	c33 N71-24876	US-PATENT-CLASS-176-11	c25 N76-27383
US-PATENT-CLASS-165-2	c35 N74-15093	US-PATENT-CLASS-176-11	c25 N76-29379
US-PATENT-CLASS-165-2	c44 N77-32581	US-PATENT-CLASS-176-14	c25 N76-29379
US-PATENT-CLASS-165-3	c03 N72-28025	US-PATENT-CLASS-176-16	c25 N76-27383
US-PATENT-CLASS-165-10	c44 N76-31667	US-PATENT-CLASS-176-16	c25 N76-29379
US-PATENT-CLASS-165-12	c33 N71-24276	US-PATENT-CLASS-176-19	c14 N70-34669
US-PATENT-CLASS-165-20	c03 N72-28025	US-PATENT-CLASS-176-19	c14 N70-36808
US-PATENT-CLASS-165-32	c31 N73-30829	US-PATENT-CLASS-176-35	c22 N70-34501
US-PATENT-CLASS-165-32	c33 N73-32818	US-PATENT-CLASS-176-45	c22 N71-10773
US-PATENT-CLASS-165-44	c15 N71-26611	US-PATENT-CLASS-176-52	c22 N70-34572
US-PATENT-CLASS-165-46	c05 N71-19439	US-PATENT-CLASS-176-86G	c22 N72-20597
US-PATENT-CLASS-165-46	c05 N71-24147	US-PATENT-CLASS-176-169	c22 N73-32528
US-PATENT-CLASS-165-46	c05 N73-20137	US-PATENT-CLASS-177-1	c35 N77-19485
US-PATENT-CLASS-165-46	c05 N73-26071	US-PATENT-CLASS-177-200	c35 N74-26945
US-PATENT-CLASS-165-47	c33 N71-29052	US-PATENT-CLASS-177-208	c35 N77-19385
US-PATENT-CLASS-165-47	c31 N73-30829	US-PATENT-CLASS-177-210	c14 N71-10773
US-PATENT-CLASS-165-47	c34 N75-12222	US-PATENT-CLASS-177-211	c35 N74-26945
US-PATENT-CLASS-165-86	c15 N71-26611	US-PATENT-CLASS-177-246	c35 N74-26945
US-PATENT-CLASS-165-86	c33 N71-29046	US-PATENT-CLASS-178-DIG.1	c36 N74-20009
US-PATENT-CLASS-165-96	c33 N70-36847	US-PATENT-CLASS-178-DIG.1	c33 N75-30431
US-PATENT-CLASS-165-96	c33 N71-22890	US-PATENT-CLASS-178-DIG.1	c45 N76-17656
US-PATENT-CLASS-165-96	c31 N73-30829	US-PATENT-CLASS-178-DIG.6	c10 N73-13235
US-PATENT-CLASS-165-96	c33 N73-32818	US-PATENT-CLASS-178-DIG.8	c14 N72-25412
US-PATENT-CLASS-165-104	c33 N71-25353	US-PATENT-CLASS-178-DIG.8	c45 N76-17656
US-PATENT-CLASS-165-105	c09 N71-24807	US-PATENT-CLASS-178-DIG.12	c07 N72-12081
US-PATENT-CLASS-165-105	c33 N71-25353	US-PATENT-CLASS-178-DIG.12	c32 N75-21485
US-PATENT-CLASS-165-105	c33 N72-17948	US-PATENT-CLASS-178-DIG.20	c23 N72-27728
US-PATENT-CLASS-165-105	c31 N73-30829	US-PATENT-CLASS-178-DIG.20	c35 N75-19613
US-PATENT-CLASS-165-105	c28 N73-32606	US-PATENT-CLASS-178-DIG.20	c18 N76-14186
US-PATENT-CLASS-165-105	c34 N74-18552	US-PATENT-CLASS-178-DIG.21	c16 N72-13437
US-PATENT-CLASS-165-105	c34 N75-12222	US-PATENT-CLASS-178-DIG.23	c07 N73-30115
US-PATENT-CLASS-165-105	c44 N75-32581	US-PATENT-CLASS-178-DIG.25	c74 N75-25706
US-PATENT-CLASS-165-105	c44 N76-16612	US-PATENT-CLASS-178-DIG.28	c08 N72-22164
US-PATENT-CLASS-165-105	c34 N76-17317	US-PATENT-CLASS-178-DIG.29	c35 N75-25123
US-PATENT-CLASS-165-105	c34 N76-27515	US-PATENT-CLASS-178-DIG.32	c71 N74-21014
US-PATENT-CLASS-165-105	c34 N77-32413	US-PATENT-CLASS-178-DIG.35	c09 N76-24280
US-PATENT-CLASS-165-106	c33 N73-32818	US-PATENT-CLASS-178-DIG.36	c08 N72-22164
US-PATENT-CLASS-165-106	c34 N76-17317	US-PATENT-CLASS-178-5.2B	c09 N71-28618
US-PATENT-CLASS-165-107	c09 N71-24807	US-PATENT-CLASS-178-5.2B	c07 N72-17109
US-PATENT-CLASS-165-107	c44 N77-32581	US-PATENT-CLASS-178-5.4	c07 N72-17109
US-PATENT-CLASS-165-109	c35 N74-15093	US-PATENT-CLASS-178-5.8B	c71 N74-21014
US-PATENT-CLASS-165-110	c77 N75-20139	US-PATENT-CLASS-178-6	c07 N71-19433
US-PATENT-CLASS-165-111	c77 N75-20139	US-PATENT-CLASS-178-6	c09 N71-19449
US-PATENT-CLASS-165-133	c33 N71-16277	US-PATENT-CLASS-178-6	c07 N71-23026
US-PATENT-CLASS-165-133	c33 N71-25353	US-PATENT-CLASS-178-6	c07 N71-26579
US-PATENT-CLASS-165-133	c33 N72-20915	US-PATENT-CLASS-178-6	c07 N72-12081
US-PATENT-CLASS-165-133	c44 N76-23675	US-PATENT-CLASS-178-6	c16 N72-13437
US-PATENT-CLASS-165-138	c09 N71-24807	US-PATENT-CLASS-178-6	c10 N73-13235
US-PATENT-CLASS-165-141	c28 N73-32606	US-PATENT-CLASS-178-6	c36 N74-20009
US-PATENT-CLASS-165-155	c33 N72-20915	US-PATENT-CLASS-178-6.5	c23 N72-27728
US-PATENT-CLASS-165-158	c33 N72-20915	US-PATENT-CLASS-178-6.6	c07 N71-11300
US-PATENT-CLASS-165-161	c33 N72-20915	US-PATENT-CLASS-178-6.6	c07 N71-26102
US-PATENT-CLASS-165-164	c34 N77-10463	US-PATENT-CLASS-178-6.6DD	c07 N73-30115
US-PATENT-CLASS-165-166	c54 N77-32722	US-PATENT-CLASS-178-6.6DD	c35 N74-11283
US-PATENT-CLASS-165-170	c34 N77-10463	US-PATENT-CLASS-178-6.7	c07 N72-17109
US-PATENT-CLASS-165-174	c33 N72-20915	US-PATENT-CLASS-178-6.7R	c35 N74-15831
US-PATENT-CLASS-165-185	c28 N73-32606	US-PATENT-CLASS-178-6.8	c08 N72-22164
US-PATENT-CLASS-169-28	c12 N72-21310	US-PATENT-CLASS-178-6.8	c14 N72-25412
US-PATENT-CLASS-169-36	c12 N72-21310	US-PATENT-CLASS-178-6.8	c07 N73-30115
US-PATENT-CLASS-173-131	c15 N73-13463	US-PATENT-CLASS-178-6.8	c33 N75-30431
US-PATENT-CLASS-173-132	c37 N76-18454	US-PATENT-CLASS-178-6.8	c45 N76-17656
US-PATENT-CLASS-174-DIG.6	c26 N73-26752	US-PATENT-CLASS-178-7.1	c07 N71-24612
US-PATENT-CLASS-174-DIG.6	c26 N73-32571	US-PATENT-CLASS-178-7.1	c07 N71-27341
US-PATENT-CLASS-174-DIG.8	c33 N74-22865	US-PATENT-CLASS-178-7.1	c09 N72-17156
US-PATENT-CLASS-174-15C	c33 N74-27683	US-PATENT-CLASS-178-7.1	c32 N74-19790
US-PATENT-CLASS-174-18	c09 N69-21542	US-PATENT-CLASS-178-7.1	c36 N75-19652

NUMBER INDEX

US-PATENT-CLASS-178-7.2	c14	N70-41807	US-PATENT-CLASS-179-100.2A	c21	N73-13644
US-PATENT-CLASS-178-7.2	c71	N74-21014	US-PATENT-CLASS-179-100.2A	c32	N74-27612
US-PATENT-CLASS-178-7.2	c35	N75-25123	US-PATENT-CLASS-179-100.2B	c32	N74-27612
US-PATENT-CLASS-178-7.2R	c08	N72-22164	US-PATENT-CLASS-179-100.2C	c35	N77-21392
US-PATENT-CLASS-178-7.3	c07	N71-27341	US-PATENT-CLASS-179-100.2CB	c36	N74-13205
US-PATENT-CLASS-178-7.3	c07	N72-12081	US-PATENT-CLASS-179-100.2K	c07	N72-21119
US-PATENT-CLASS-178-7.5E	c10	N72-31273	US-PATENT-CLASS-179-100.2MD	c35	N74-11283
US-PATENT-CLASS-178-7.6	c36	N74-20009	US-PATENT-CLASS-179-100.2T	c35	N74-11283
US-PATENT-CLASS-178-7.7	c09	N71-12539	US-PATENT-CLASS-179-100-2CA	c09	N72-11224
US-PATENT-CLASS-178-7.7	c32	N74-20813	US-PATENT-CLASS-179-100-2MD	c09	N72-11224
US-PATENT-CLASS-178-7.89	c09	N76-24280	US-PATENT-CLASS-179-175.1A	c14	N73-27379
US-PATENT-CLASS-178-7.92	c14	N72-25414	US-PATENT-CLASS-180-6.5	c11	N73-26238
US-PATENT-CLASS-178-15	c33	N75-19517	US-PATENT-CLASS-180-7B	c11	N73-26238
US-PATENT-CLASS-178-18	c10	N73-32143	US-PATENT-CLASS-180-8A	c11	N73-26238
US-PATENT-CLASS-178-50	c08	N72-18184	US-PATENT-CLASS-180-9.2R	c11	N73-26238
US-PATENT-CLASS-178-50	c08	N72-25208	US-PATENT-CLASS-180-9.5	c11	N73-26238
US-PATENT-CLASS-178-52	c08	N72-22162	US-PATENT-CLASS-180-41	c11	N73-26238
US-PATENT-CLASS-178-54CF	c09	N71-28618	US-PATENT-CLASS-180-79.3	c37	N74-18125
US-PATENT-CLASS-178-54PE	c09	N71-28618	US-PATENT-CLASS-180-105E	c11	N72-20244
US-PATENT-CLASS-178-58A	c32	N75-21486	US-PATENT-CLASS-180-118	c31	N71-15689
US-PATENT-CLASS-178-66	c09	N71-25866	US-PATENT-CLASS-180-121	c31	N71-15689
US-PATENT-CLASS-178-66	c08	N72-18184	US-PATENT-CLASS-180-125	c15	N72-17451
US-PATENT-CLASS-178-66B	c32	N75-24981	US-PATENT-CLASS-180-127	c15	N72-17451
US-PATENT-CLASS-178-67	c08	N70-41961	US-PATENT-CLASS-181-5B	c71	N74-31148
US-PATENT-CLASS-178-67	c32	N74-26654	US-PATENT-CLASS-181-.5	c11	N71-28779
US-PATENT-CLASS-178-69.4B	c32	N74-10132	US-PATENT-CLASS-181-33C	c07	N74-32418
US-PATENT-CLASS-178-69.5	c07	N71-11281	US-PATENT-CLASS-181-33F	c07	N74-32418
US-PATENT-CLASS-178-69.5	c10	N71-19468	US-PATENT-CLASS-181-33H	c07	N74-32418
US-PATENT-CLASS-178-69.5	c10	N71-25865	US-PATENT-CLASS-181-33HB	c07	N74-27490
US-PATENT-CLASS-178-69.5	c10	N71-33407	US-PATENT-CLASS-181-33HC	c07	N74-33218
US-PATENT-CLASS-178-69.5	c07	N72-25173	US-PATENT-CLASS-181-33HC	c07	N76-18117
US-PATENT-CLASS-178-69.5	c07	N73-13149	US-PATENT-CLASS-181-33L	c07	N74-32418
US-PATENT-CLASS-178-69.5	c09	N73-28084	US-PATENT-CLASS-181-42	c07	N74-32418
US-PATENT-CLASS-178-69.5	c17	N76-22245	US-PATENT-CLASS-181-43	c07	N74-15453
US-PATENT-CLASS-178-69.5R	c07	N72-20140	US-PATENT-CLASS-181-52	c28	N70-41582
US-PATENT-CLASS-178-69.5B	c32	N75-26195	US-PATENT-CLASS-182-5	c15	N73-25512
US-PATENT-CLASS-178-69.5B	c33	N76-14371	US-PATENT-CLASS-182-10	c15	N71-27067
US-PATENT-CLASS-178-69.5R	c60	N77-19760	US-PATENT-CLASS-182-17B	c39	N76-31562
US-PATENT-CLASS-178-69A	c35	N75-21582	US-PATENT-CLASS-182-191	c05	N71-11199
US-PATENT-CLASS-178-69C	c32	N76-16249	US-PATENT-CLASS-184-1	c15	N71-23048
US-PATENT-CLASS-178-79	c32	N75-21486	US-PATENT-CLASS-187-1	c15	N72-25453
US-PATENT-CLASS-178-88	c07	N71-12392	US-PATENT-CLASS-187-7.1	c07	N71-28742
US-PATENT-CLASS-178-88	c33	N74-12887	US-PATENT-CLASS-187-20	c15	N72-25453
US-PATENT-CLASS-178-88	c32	N74-20809	US-PATENT-CLASS-187-95	c15	N72-25453
US-PATENT-CLASS-178-88	c33	N74-27705	US-PATENT-CLASS-188-1	c15	N70-38861
US-PATENT-CLASS-178-88	c33	N76-14371	US-PATENT-CLASS-188-1	c15	N70-38861
US-PATENT-CLASS-178-88	c32	N76-16249	US-PATENT-CLASS-188-1	c15	N70-40354
US-PATENT-CLASS-178-88	c32	N77-10392	US-PATENT-CLASS-188-1	c14	N71-17626
US-PATENT-CLASS-178-88	c32	N77-24331	US-PATENT-CLASS-188-1	c15	N71-22877
US-PATENT-CLASS-179-1	c07	N71-26181	US-PATENT-CLASS-188-1	c14	N71-23092
US-PATENT-CLASS-179-1	c31	N71-33160	US-PATENT-CLASS-188-1	c15	N71-26243
US-PATENT-CLASS-179-1P	c10	N73-12244	US-PATENT-CLASS-188-1	c15	N71-27146
US-PATENT-CLASS-179-1B	c07	N71-33108	US-PATENT-CLASS-188-1	c15	N71-27169
US-PATENT-CLASS-179-1SA	c10	N73-25240	US-PATENT-CLASS-188-1B	c15	N72-20443
US-PATENT-CLASS-179-1SA	c32	N76-31372	US-PATENT-CLASS-188-1E	c19	N76-22284
US-PATENT-CLASS-179-1SA	c32	N77-30309	US-PATENT-CLASS-188-1C	c15	N72-17450
US-PATENT-CLASS-179-1SP	c32	N77-30309	US-PATENT-CLASS-188-1C	c15	N72-20443
US-PATENT-CLASS-179-1VC	c07	N71-33108	US-PATENT-CLASS-188-1C	c15	N73-30460
US-PATENT-CLASS-179-15	c07	N69-39978	US-PATENT-CLASS-188-1C	c11	N73-32152
US-PATENT-CLASS-179-15	c07	N71-20814	US-PATENT-CLASS-188-65.1	c15	N73-25512
US-PATENT-CLASS-179-15	c07	N71-24621	US-PATENT-CLASS-188-65.5	c15	N71-27067
US-PATENT-CLASS-179-15	c07	N71-24622	US-PATENT-CLASS-188-87	c12	N71-16894
US-PATENT-CLASS-179-15	c08	N72-18184	US-PATENT-CLASS-188-88	c15	N71-26611
US-PATENT-CLASS-179-15.55E	c08	N72-11171	US-PATENT-CLASS-188-103	c15	N71-27146
US-PATENT-CLASS-179-15.55E	c08	N72-33172	US-PATENT-CLASS-188-129	c15	N72-17450
US-PATENT-CLASS-179-15A	c08	N72-22162	US-PATENT-CLASS-188-163	c37	N74-26976
US-PATENT-CLASS-179-15A	c07	N73-26118	US-PATENT-CLASS-188-171	c37	N74-26976
US-PATENT-CLASS-179-15AN	c07	N73-16121	US-PATENT-CLASS-188-266	c15	N73-25513
US-PATENT-CLASS-179-15AT	c32	N74-30524	US-PATENT-CLASS-188-268	c15	N72-20443
US-PATENT-CLASS-179-15BA	c60	N77-12721	US-PATENT-CLASS-188-291	c54	N77-21844
US-PATENT-CLASS-179-15BC	c08	N72-25208	US-PATENT-CLASS-189-36	c15	N70-36947
US-PATENT-CLASS-179-15BC	c7	N73-16121	US-PATENT-CLASS-192-43.1	c15	N71-17805
US-PATENT-CLASS-179-15BC	c32	N74-30523	US-PATENT-CLASS-195-1.8	c51	N77-25769
US-PATENT-CLASS-179-15BC	c33	N75-26243	US-PATENT-CLASS-195-28N	c06	N72-25149
US-PATENT-CLASS-179-15BL	c08	N72-22162	US-PATENT-CLASS-195-66R	c06	N73-27086
US-PATENT-CLASS-179-15BM	c07	N73-26118	US-PATENT-CLASS-195-68	c04	N69-27487
US-PATENT-CLASS-179-15BS	c10	N71-33407	US-PATENT-CLASS-195-99	c06	N71-17705
US-PATENT-CLASS-179-15BS	c07	N72-20140	US-PATENT-CLASS-195-103.5K	c51	N77-22794
US-PATENT-CLASS-179-15BS	c07	N73-30115	US-PATENT-CLASS-195-103.5R	c06	N72-25149
US-PATENT-CLASS-179-15BS	c32	N75-26195	US-PATENT-CLASS-195-103.5R	c25	N75-12086
US-PATENT-CLASS-179-15BS	c60	N77-19760	US-PATENT-CLASS-195-103.5R	c35	N75-27330
US-PATENT-CLASS-179-15BV	c07	N72-25172	US-PATENT-CLASS-195-103.5R	c35	N75-33368
US-PATENT-CLASS-179-15BY	c32	N74-30524	US-PATENT-CLASS-195-103.5R	c51	N76-29891
US-PATENT-CLASS-179-15FD	c08	N72-25208	US-PATENT-CLASS-195-103.5R	c51	N77-22794
US-PATENT-CLASS-179-15FS	c07	N73-28012	US-PATENT-CLASS-195-120	c51	N75-13502
US-PATENT-CLASS-179-100.2	c09	N69-24329	US-PATENT-CLASS-195-120	c35	N75-27330
US-PATENT-CLASS-179-100.2	c09	N71-25866	US-PATENT-CLASS-195-127	c15	N72-21465
US-PATENT-CLASS-179-100.2	c08	N71-27210	US-PATENT-CLASS-195-127	c11	N72-25284
US-PATENT-CLASS-179-100.2	c08	N71-27255	US-PATENT-CLASS-195-127	c14	N72-25413

NUMBER INDEX

US-PATENT-CLASS-195-127	.....	c15	N73-20514	US-PATENT-CLASS-210-82	.....	c34	N75-33342
US-PATENT-CLASS-195-127	.....	c05	N73-32011	US-PATENT-CLASS-210-103	.....	c05	N72-27102
US-PATENT-CLASS-195-127	.....	c35	N75-12272	US-PATENT-CLASS-210-104	.....	c05	N72-27102
US-PATENT-CLASS-195-127	.....	c51	N75-13502	US-PATENT-CLASS-210-110	.....	c05	N72-27102
US-PATENT-CLASS-195-127	.....	c35	N75-27330	US-PATENT-CLASS-210-137	.....	c05	N72-27102
US-PATENT-CLASS-195-141	.....	c35	N75-27330	US-PATENT-CLASS-210-188	.....	c12	N72-25292
US-PATENT-CLASS-197-188	.....	c37	N77-19457	US-PATENT-CLASS-210-212	.....	c03	N72-20043
US-PATENT-CLASS-197-190	.....	c37	N77-19457	US-PATENT-CLASS-210-234	.....	c34	N75-33342
US-PATENT-CLASS-200-6	.....	c10	N71-15909	US-PATENT-CLASS-210-259	.....	c34	N75-33342
US-PATENT-CLASS-200-6	.....	c09	N71-16089	US-PATENT-CLASS-210-304	.....	c34	N75-33342
US-PATENT-CLASS-200-19	.....	c09	N70-39915	US-PATENT-CLASS-210-314	.....	c28	N70-41447
US-PATENT-CLASS-200-39	.....	c03	N70-38713	US-PATENT-CLASS-210-333	.....	c34	N75-33342
US-PATENT-CLASS-200-61.42	.....	c09	N71-12518	US-PATENT-CLASS-210-340	.....	c34	N75-33342
US-PATENT-CLASS-200-61.45	.....	c14	N70-41812	US-PATENT-CLASS-210-411	.....	c34	N75-33342
US-PATENT-CLASS-200-64	.....	c15	N72-17455	US-PATENT-CLASS-210-425	.....	c34	N75-33342
US-PATENT-CLASS-200-81.9H	.....	c09	N72-20199	US-PATENT-CLASS-210-429	.....	c37	N76-14463
US-PATENT-CLASS-200-81H	.....	c09	N72-22204	US-PATENT-CLASS-210-445	.....	c15	N72-11389
US-PATENT-CLASS-200-82	.....	c10	N71-23663	US-PATENT-CLASS-210-500	.....	c25	N75-12087
US-PATENT-CLASS-200-82C	.....	c09	N72-22204	US-PATENT-CLASS-210-512	.....	c34	N75-33342
US-PATENT-CLASS-200-83M	.....	c35	N75-15931	US-PATENT-CLASS-212-11	.....	c32	N71-17609
US-PATENT-CLASS-200-129	.....	c33	N75-27249	US-PATENT-CLASS-212-134	.....	c15	N72-11388
US-PATENT-CLASS-200-152	.....	c09	N71-19610	US-PATENT-CLASS-213-81	.....	c37	N77-23483
US-PATENT-CLASS-202-182	.....	c05	N71-11207	US-PATENT-CLASS-214-1CM	.....	c37	N76-15460
US-PATENT-CLASS-202-234	.....	c15	N71-23086	US-PATENT-CLASS-214-1	.....	c32	N70-41367
US-PATENT-CLASS-204-DIG.11	.....	c25	N77-32255	US-PATENT-CLASS-214-1B	.....	c54	N75-27758
US-PATENT-CLASS-204-9	.....	c20	N74-32919	US-PATENT-CLASS-214-1BC	.....	c54	N77-32721
US-PATENT-CLASS-204-9	.....	c24	N77-19171	US-PATENT-CLASS-214-1CM	.....	c15	N72-28495
US-PATENT-CLASS-204-16	.....	c24	N77-19171	US-PATENT-CLASS-214-1CM	.....	c54	N75-12616
US-PATENT-CLASS-204-20	.....	c18	N71-16210	US-PATENT-CLASS-214-1CM	.....	c18	N75-27041
US-PATENT-CLASS-204-30	.....	c09	N71-28691	US-PATENT-CLASS-214-1CM	.....	c54	N75-27758
US-PATENT-CLASS-204-32A	.....	c33	N77-26385	US-PATENT-CLASS-214-1CM	.....	c37	N77-23483
US-PATENT-CLASS-204-32R	.....	c44	N76-14595	US-PATENT-CLASS-214-1CM	.....	c54	N77-32721
US-PATENT-CLASS-204-33	.....	c17	N71-25903	US-PATENT-CLASS-214-1R	.....	c37	N76-15457
US-PATENT-CLASS-204-33	.....	c44	N76-14595	US-PATENT-CLASS-214-16.1CB	.....	c37	N77-22480
US-PATENT-CLASS-204-37	.....	c33	N71-29151	US-PATENT-CLASS-214-90R	.....	c03	N72-25021
US-PATENT-CLASS-204-38	.....	c17	N71-24830	US-PATENT-CLASS-215-247	.....	c33	N76-19339
US-PATENT-CLASS-204-38A	.....	c44	N76-14595	US-PATENT-CLASS-219-10.49	.....	c11	N71-15925
US-PATENT-CLASS-204-40	.....	c44	N76-14595	US-PATENT-CLASS-219-19	.....	c33	N70-34812
US-PATENT-CLASS-204-40	.....	c24	N77-19171	US-PATENT-CLASS-219-34	.....	c09	N70-33312
US-PATENT-CLASS-204-42	.....	c44	N76-14595	US-PATENT-CLASS-219-50	.....	c14	N73-26430
US-PATENT-CLASS-204-49	.....	c15	N72-25452	US-PATENT-CLASS-219-62	.....	c15	N73-28515
US-PATENT-CLASS-204-49	.....	c44	N76-14595	US-PATENT-CLASS-219-72	.....	c15	N71-14932
US-PATENT-CLASS-204-59	.....	c15	N72-21466	US-PATENT-CLASS-219-78	.....	c37	N74-11300
US-PATENT-CLASS-204-130	.....	c15	N72-21466	US-PATENT-CLASS-219-85	.....	c15	N72-22491
US-PATENT-CLASS-204-157.1H	.....	c25	N74-30502	US-PATENT-CLASS-219-85	.....	c15	N72-23497
US-PATENT-CLASS-204-157.1H	.....	c37	N76-18458	US-PATENT-CLASS-219-91	.....	c15	N71-18613
US-PATENT-CLASS-204-157.1R	.....	c25	N77-32255	US-PATENT-CLASS-219-91	.....	c15	N73-32358
US-PATENT-CLASS-204-157.1R	.....	c44	N77-32580	US-PATENT-CLASS-219-92	.....	c37	N76-27568
US-PATENT-CLASS-204-157.18AG	.....	c15	N72-25452	US-PATENT-CLASS-219-92	.....	c37	N77-11397
US-PATENT-CLASS-204-158R	.....	c25	N77-32255	US-PATENT-CLASS-219-101	.....	c37	N74-11300
US-PATENT-CLASS-204-162R	.....	c25	N77-32255	US-PATENT-CLASS-219-107	.....	c15	N73-28515
US-PATENT-CLASS-204-168	.....	c24	N71-25555	US-PATENT-CLASS-219-107	.....	c37	N74-11300
US-PATENT-CLASS-204-177	.....	c25	N75-12087	US-PATENT-CLASS-219-109	.....	c15	N72-23497
US-PATENT-CLASS-204-180R	.....	c25	N74-26948	US-PATENT-CLASS-219-117	.....	c15	N73-32358
US-PATENT-CLASS-204-180R	.....	c34	N74-27744	US-PATENT-CLASS-219-118	.....	c37	N76-27568
US-PATENT-CLASS-204-192	.....	c15	N73-12487	US-PATENT-CLASS-219-118	.....	c37	N77-11397
US-PATENT-CLASS-204-192	.....	c17	N73-24569	US-PATENT-CLASS-219-121	.....	c15	N69-21471
US-PATENT-CLASS-204-192	.....	c27	N74-13270	US-PATENT-CLASS-219-121	.....	c33	N70-34540
US-PATENT-CLASS-204-192	.....	c20	N74-31269	US-PATENT-CLASS-219-121	.....	c15	N71-19486
US-PATENT-CLASS-204-192	.....	c37	N75-19684	US-PATENT-CLASS-219-121	.....	c16	N71-20400
US-PATENT-CLASS-204-192	.....	c44	N77-14580	US-PATENT-CLASS-219-121	.....	c15	N71-27145
US-PATENT-CLASS-204-195	.....	c14	N71-17575	US-PATENT-CLASS-219-121P	.....	c15	N72-32487
US-PATENT-CLASS-204-195R	.....	c33	N76-19339	US-PATENT-CLASS-219-125	.....	c15	N71-23815
US-PATENT-CLASS-204-222	.....	c31	N74-23065	US-PATENT-CLASS-219-125	.....	c37	N75-27376
US-PATENT-CLASS-204-242	.....	c33	N75-27252	US-PATENT-CLASS-219-130	.....	c15	N71-23798
US-PATENT-CLASS-204-263	.....	c14	N71-28933	US-PATENT-CLASS-219-131	.....	c15	N71-15871
US-PATENT-CLASS-204-267	.....	c33	N75-27252	US-PATENT-CLASS-219-137	.....	c15	N70-34814
US-PATENT-CLASS-204-279	.....	c33	N75-27252	US-PATENT-CLASS-219-137	.....	c37	N75-19683
US-PATENT-CLASS-204-286	.....	c33	N75-27252	US-PATENT-CLASS-219-158	.....	c15	N72-22491
US-PATENT-CLASS-204-290R	.....	c33	N75-27252	US-PATENT-CLASS-219-203	.....	c11	N73-12265
US-PATENT-CLASS-204-298	.....	c15	N70-34967	US-PATENT-CLASS-219-216	.....	c35	N74-15831
US-PATENT-CLASS-204-298	.....	c09	N71-26701	US-PATENT-CLASS-219-221	.....	c15	N72-11392
US-PATENT-CLASS-204-298	.....	c15	N72-32487	US-PATENT-CLASS-219-229	.....	c15	N71-27214
US-PATENT-CLASS-204-298	.....	c37	N75-19684	US-PATENT-CLASS-219-234	.....	c15	N72-22491
US-PATENT-CLASS-204-299	.....	c34	N74-27744	US-PATENT-CLASS-219-234	.....	c15	N72-23497
US-PATENT-CLASS-204-305	.....	c03	N71-24718	US-PATENT-CLASS-219-243	.....	c15	N72-11392
US-PATENT-CLASS-204-324	.....	c33	N73-16918	US-PATENT-CLASS-219-273	.....	c15	N72-32487
US-PATENT-CLASS-204-325	.....	c33	N73-16918	US-PATENT-CLASS-219-275	.....	c15	N71-20395
US-PATENT-CLASS-204-328	.....	c33	N73-16918	US-PATENT-CLASS-219-300	.....	c37	N77-13418
US-PATENT-CLASS-205-343	.....	c35	N75-30502	US-PATENT-CLASS-219-304	.....	c37	N77-13418
US-PATENT-CLASS-209-10	.....	c15	N71-20440	US-PATENT-CLASS-219-347	.....	c15	N69-27871
US-PATENT-CLASS-209-127R	.....	c35	N76-22509	US-PATENT-CLASS-219-347	.....	c33	N70-34545
US-PATENT-CLASS-209-250	.....	c37	N76-18456	US-PATENT-CLASS-219-348	.....	c15	N73-27405
US-PATENT-CLASS-209-300	.....	c37	N76-18456	US-PATENT-CLASS-219-364	.....	c33	N71-16218
US-PATENT-CLASS-209-305	.....	c37	N76-18456	US-PATENT-CLASS-219-378	.....	c33	N71-25353
US-PATENT-CLASS-209-349	.....	c15	N72-22483	US-PATENT-CLASS-219-388	.....	c35	N74-15831
US-PATENT-CLASS-210-DIG.27	.....	c27	N77-31308	US-PATENT-CLASS-219-411	.....	c17	N69-25147
US-PATENT-CLASS-210-24	.....	c27	N77-30236	US-PATENT-CLASS-219-413	.....	c14	N71-28958
US-PATENT-CLASS-210-40	.....	c27	N77-31308	US-PATENT-CLASS-219-477	.....	c33	N74-14935

NUMBER INDEX

US-PATENT-CLASS-219-497	c77	N75-20140	US-PATENT-CLASS-235-92	c14	N71-27215
US-PATENT-CLASS-219-499	c14	N73-26430	US-PATENT-CLASS-235-92CA	c33	N74-10223
US-PATENT-CLASS-219-501	c77	N75-20140	US-PATENT-CLASS-235-92CA	c38	N77-17495
US-PATENT-CLASS-219-505	c14	N71-27058	US-PATENT-CLASS-235-92CC	c08	N72-20176
US-PATENT-CLASS-219-505	c77	N75-20140	US-PATENT-CLASS-235-92CT	c38	N77-17495
US-PATENT-CLASS-219-522	c11	N73-12265	US-PATENT-CLASS-235-92CV	c08	N73-25206
US-PATENT-CLASS-219-530	c33	N71-25353	US-PATENT-CLASS-235-92DE	c08	N72-20176
US-PATENT-CLASS-219-539	c33	N74-14935	US-PATENT-CLASS-235-92DH	c08	N72-20176
US-PATENT-CLASS-220-1	c31	N71-17680	US-PATENT-CLASS-235-92DM	c33	N74-10223
US-PATENT-CLASS-220-5R	c15	N72-22486	US-PATENT-CLASS-235-92DM	c33	N75-19519
US-PATENT-CLASS-220-9	c23	N71-22881	US-PATENT-CLASS-235-92DN	c08	N73-25206
US-PATENT-CLASS-220-9	c18	N71-23658	US-PATENT-CLASS-235-92DN	c38	N77-17495
US-PATENT-CLASS-220-9	c15	N71-23816	US-PATENT-CLASS-235-92EA	c08	N73-25206
US-PATENT-CLASS-220-9	c33	N71-25351	US-PATENT-CLASS-235-92EV	c08	N73-25206
US-PATENT-CLASS-220-14	c15	N69-39935	US-PATENT-CLASS-235-92FQ	c08	N73-20217
US-PATENT-CLASS-220-15	c31	N71-15664	US-PATENT-CLASS-235-92LG	c08	N72-20176
US-PATENT-CLASS-220-15	c34	N75-12222	US-PATENT-CLASS-235-92LG	c33	N75-19519
US-PATENT-CLASS-220-46	c15	N71-27068	US-PATENT-CLASS-235-92MT	c08	N72-31226
US-PATENT-CLASS-220-55	c15	N69-27502	US-PATENT-CLASS-235-92MT	c32	N73-26910
US-PATENT-CLASS-220-63	c11	N70-38182	US-PATENT-CLASS-235-92PE	c37	N74-21056
US-PATENT-CLASS-220-67	c15	N71-10577	US-PATENT-CLASS-235-92R	c08	N72-20176
US-PATENT-CLASS-220-89	c11	N71-15960	US-PATENT-CLASS-235-92R	c08	N73-20217
US-PATENT-CLASS-220-89	c11	N71-17600	US-PATENT-CLASS-235-92R	c08	N73-25206
US-PATENT-CLASS-221-265	c51	N74-15778	US-PATENT-CLASS-235-92R	c33	N75-19519
US-PATENT-CLASS-222-45	c14	N70-40233	US-PATENT-CLASS-235-92R	c38	N77-17495
US-PATENT-CLASS-222-49	c14	N71-27005	US-PATENT-CLASS-235-92SB	c37	N74-21056
US-PATENT-CLASS-222-61	c27	N71-29155	US-PATENT-CLASS-235-92SH	c33	N76-14473
US-PATENT-CLASS-222-61	c37	N77-28487	US-PATENT-CLASS-235-92T	c03	N72-25020
US-PATENT-CLASS-222-71	c15	N72-21465	US-PATENT-CLASS-235-92T	c08	N73-20217
US-PATENT-CLASS-222-95	c37	N77-28487	US-PATENT-CLASS-235-92T	c33	N75-19519
US-PATENT-CLASS-222-135	c15	N72-21465	US-PATENT-CLASS-235-92VA	c33	N75-19519
US-PATENT-CLASS-222-137	c14	N71-27005	US-PATENT-CLASS-235-150.1	c08	N71-29033
US-PATENT-CLASS-222-145	c37	N76-19436	US-PATENT-CLASS-235-150.1	c08	N72-31226
US-PATENT-CLASS-222-193	c37	N74-13178	US-PATENT-CLASS-235-150.1	c32	N77-10392
US-PATENT-CLASS-222-309	c15	N72-21465	US-PATENT-CLASS-235-150.2	c08	N71-29033
US-PATENT-CLASS-222-309	c54	N74-12779	US-PATENT-CLASS-235-150.2	c35	N77-26399
US-PATENT-CLASS-222-324	c54	N74-17853	US-PATENT-CLASS-235-150.3	c33	N74-10223
US-PATENT-CLASS-222-340	c54	N74-12779	US-PATENT-CLASS-235-150.22	c02	N71-13421
US-PATENT-CLASS-222-387	c54	N74-12779	US-PATENT-CLASS-235-150.22	c04	N74-13420
US-PATENT-CLASS-222-389	c15	N70-38996	US-PATENT-CLASS-235-150.25	c21	N71-21688
US-PATENT-CLASS-222-414	c14	N73-27378	US-PATENT-CLASS-235-150.25	c35	N77-20399
US-PATENT-CLASS-222-514	c54	N74-12779	US-PATENT-CLASS-235-150.26	c04	N74-13420
US-PATENT-CLASS-224-25	c05	N71-12351	US-PATENT-CLASS-235-150.27	c08	N71-29033
US-PATENT-CLASS-224-25A	c05	N72-23085	US-PATENT-CLASS-235-150.52	c08	N72-22165
US-PATENT-CLASS-224-444	c54	N74-17853	US-PATENT-CLASS-235-150.53	c08	N72-22165
US-PATENT-CLASS-225-1	c15	N71-17628	US-PATENT-CLASS-235-150.53	c07	N73-13149
US-PATENT-CLASS-225-2	c26	N71-14354	US-PATENT-CLASS-235-150.53	c33	N75-26243
US-PATENT-CLASS-225-58	c14	N71-28935	US-PATENT-CLASS-235-151	c37	N74-21056
US-PATENT-CLASS-226-190	c08	N71-19420	US-PATENT-CLASS-235-151.1	c08	N71-29033
US-PATENT-CLASS-228-1	c37	N75-25185	US-PATENT-CLASS-235-151.1	c08	N72-31226
US-PATENT-CLASS-228-7	c15	N71-15607	US-PATENT-CLASS-235-151.3	c52	N74-22771
US-PATENT-CLASS-228-8	c15	N71-23050	US-PATENT-CLASS-235-151.13	c25	N76-18245
US-PATENT-CLASS-228-9	c15	N71-20393	US-PATENT-CLASS-235-151.27	c08	N73-25206
US-PATENT-CLASS-228-50	c15	N70-39924	US-PATENT-CLASS-235-151.31	c10	N73-25240
US-PATENT-CLASS-228-50	c15	N70-40204	US-PATENT-CLASS-235-151.34	c35	N76-14441
US-PATENT-CLASS-228-53	c15	N71-27214	US-PATENT-CLASS-235-152	c07	N71-24741
US-PATENT-CLASS-228-57	c15	N72-22491	US-PATENT-CLASS-235-152	c08	N72-20176
US-PATENT-CLASS-228-124	c26	N77-29260	US-PATENT-CLASS-235-152	c08	N72-22167
US-PATENT-CLASS-228-190	c24	N75-28135	US-PATENT-CLASS-235-152	c08	N72-25210
US-PATENT-CLASS-228-190	c26	N77-28265	US-PATENT-CLASS-235-152	c08	N73-12175
US-PATENT-CLASS-228-193	c24	N75-28135	US-PATENT-CLASS-235-152	c09	N73-13209
US-PATENT-CLASS-228-193	c37	N76-18455	US-PATENT-CLASS-235-152	c08	N72-26175
US-PATENT-CLASS-228-194	c26	N77-28265	US-PATENT-CLASS-235-152	c60	N77-14751
US-PATENT-CLASS-228-206	c37	N76-18455	US-PATENT-CLASS-235-152IE	c08	N73-32081
US-PATENT-CLASS-228-214	c37	N76-18455	US-PATENT-CLASS-235-153	c08	N71-24633
US-PATENT-CLASS-228-232	c26	N77-28265	US-PATENT-CLASS-235-153	c08	N72-22166
US-PATENT-CLASS-228-238	c37	N76-18455	US-PATENT-CLASS-235-153AE	c60	N76-21914
US-PATENT-CLASS-228-263	c26	N77-29260	US-PATENT-CLASS-235-153AK	c62	N74-14920
US-PATENT-CLASS-229-DIG. 11	c32	N73-13921	US-PATENT-CLASS-235-154	c08	N70-34778
US-PATENT-CLASS-230-54	c11	N72-22245	US-PATENT-CLASS-235-154	c10	N71-23662
US-PATENT-CLASS-230-162	c33	N71-17610	US-PATENT-CLASS-235-154	c08	N72-18184
US-PATENT-CLASS-230-221	c11	N72-22245	US-PATENT-CLASS-235-154	c08	N72-25206
US-PATENT-CLASS-233-DIG. 1	c34	N75-26282	US-PATENT-CLASS-235-155	c08	N71-24890
US-PATENT-CLASS-233-6	c34	N75-26282	US-PATENT-CLASS-235-155	c08	N72-21197
US-PATENT-CLASS-233-11	c15	N71-16079	US-PATENT-CLASS-235-155	c08	N73-12176
US-PATENT-CLASS-233-20FE	c34	N75-26282	US-PATENT-CLASS-235-156	c08	N71-18693
US-PATENT-CLASS-233-25	c34	N75-26282	US-PATENT-CLASS-235-156	c60	N75-13539
US-PATENT-CLASS-233-46	c34	N75-26282	US-PATENT-CLASS-235-156	c32	N76-21366
US-PATENT-CLASS-235-150.27	c04	N74-13420	US-PATENT-CLASS-235-156	c32	N77-10392
US-PATENT-CLASS-235-10.2	c08	N73-25206	US-PATENT-CLASS-235-158	c08	N71-19437
US-PATENT-CLASS-235-61.6	c01	N71-13411	US-PATENT-CLASS-235-164	c08	N71-33110
US-PATENT-CLASS-235-61.6	c15	N71-21179	US-PATENT-CLASS-235-164	c08	N73-26175
US-PATENT-CLASS-235-61NV	c08	N72-11172	US-PATENT-CLASS-235-164	c60	N74-20836
US-PATENT-CLASS-235-61NV	c35	N76-29552	US-PATENT-CLASS-235-175	c08	N71-18602
US-PATENT-CLASS-235-78H	c35	N76-29552	US-PATENT-CLASS-235-175	c08	N71-33110
US-PATENT-CLASS-235-88H	c35	N76-29552	US-PATENT-CLASS-235-176	c08	N70-34787
US-PATENT-CLASS-235-92	c08	N71-22897	US-PATENT-CLASS-235-181	c07	N71-21476
US-PATENT-CLASS-235-92	c08	N71-24891	US-PATENT-CLASS-235-181	c07	N73-13149
US-PATENT-CLASS-235-92	c10	N71-27137	US-PATENT-CLASS-235-181	c35	N75-21582

NUMBER INDEX

US-PATENT-CLASS-235-181	c33	N75-26243	US-PATENT-CLASS-244-1	c31	N71-16222
US-PATENT-CLASS-235-181	c43	N77-10584	US-PATENT-CLASS-244-1	c31	N71-16345
US-PATENT-CLASS-235-183	c08	N72-22165	US-PATENT-CLASS-244-1	c31	N71-16346
US-PATENT-CLASS-235-184	c74	N76-18913	US-PATENT-CLASS-244-1	c31	N71-17679
US-PATENT-CLASS-235-186	c10	N73-26230	US-PATENT-CLASS-244-1	c15	N71-17693
US-PATENT-CLASS-235-194	c09	N71-19480	US-PATENT-CLASS-244-1	c31	N71-17729
US-PATENT-CLASS-235-194	c08	N72-22165	US-PATENT-CLASS-244-1	c15	N71-19214
US-PATENT-CLASS-235-154	c10	N73-26230	US-PATENT-CLASS-244-1	c03	N71-20273
US-PATENT-CLASS-235-197	c08	N72-22165	US-PATENT-CLASS-244-1	c31	N71-20396
US-PATENT-CLASS-235-197	c09	N72-23173	US-PATENT-CLASS-244-1	c31	N71-21064
US-PATENT-CLASS-235-157	c10	N73-20253	US-PATENT-CLASS-244-1	c14	N71-21082
US-PATENT-CLASS-235-197	c10	N73-26230	US-PATENT-CLASS-244-1	c21	N71-21708
US-PATENT-CLASS-235-197	c60	N75-13539	US-PATENT-CLASS-244-1	c31	N71-21881
US-PATENT-CLASS-235-201	c10	N71-25899	US-PATENT-CLASS-244-1	c33	N71-22792
US-PATENT-CLASS-236-1	c33	N71-16357	US-PATENT-CLASS-244-1	c31	N71-22968
US-PATENT-CLASS-236-49	c31	N74-27902	US-PATENT-CLASS-244-1	c31	N71-22969
US-PATENT-CLASS-236-68	c15	N72-12409	US-PATENT-CLASS-244-1	c31	N71-23009
US-PATENT-CLASS-237-1A	c44	N76-18602	US-PATENT-CLASS-244-1	c14	N71-23040
US-PATENT-CLASS-237-60	c34	N76-17317	US-PATENT-CLASS-244-1	c31	N71-23912
US-PATENT-CLASS-238-1	c05	N71-28619	US-PATENT-CLASS-244-1	c31	N71-24315
US-PATENT-CLASS-238-134	c85	N74-38672	US-PATENT-CLASS-244-1	c15	N71-24600
US-PATENT-CLASS-239-127.1	c28	N71-23968	US-PATENT-CLASS-244-1	c05	N71-24728
US-PATENT-CLASS-239-127.1	c28	N73-32606	US-PATENT-CLASS-244-1	c33	N71-25353
US-PATENT-CLASS-239-127.3	c20	N76-14191	US-PATENT-CLASS-244-1	c31	N71-25434
US-PATENT-CLASS-239-171	c37	N77-13418	US-PATENT-CLASS-244-1	c31	N71-26537
US-PATENT-CLASS-239-265.11	c18	N71-21068	US-PATENT-CLASS-244-1	c15	N71-26611
US-PATENT-CLASS-239-265.11	c07	N74-33218	US-PATENT-CLASS-244-1	c28	N71-27095
US-PATENT-CLASS-239-265.11	c07	N76-18117	US-PATENT-CLASS-244-1	c21	N71-27324
US-PATENT-CLASS-239-265.17	c07	N74-27490	US-PATENT-CLASS-244-1	c33	N71-28903
US-PATENT-CLASS-239-265.19	c28	N71-21493	US-PATENT-CLASS-244-1	c15	N71-28936
US-PATENT-CLASS-239-265.19	c28	N72-11708	US-PATENT-CLASS-244-1	c31	N71-29050
US-PATENT-CLASS-239-265.43	c28	N71-16224	US-PATENT-CLASS-244-1	c31	N71-33160
US-PATENT-CLASS-239-265.43	c28	N72-11708	US-PATENT-CLASS-244-1.55	c03	N73-20040
US-PATENT-CLASS-239-416	c15	N69-23185	US-PATENT-CLASS-244-1A	c33	N77-10429
US-PATENT-CLASS-239-416	c15	N71-17654	US-PATENT-CLASS-244-1SA	c21	N72-21624
US-PATENT-CLASS-239-418	c28	N72-23809	US-PATENT-CLASS-244-1SA	c21	N72-25595
US-PATENT-CLASS-239-424	c15	N72-25455	US-PATENT-CLASS-244-1SA	c03	N73-20039
US-PATENT-CLASS-239-433	c28	N72-23809	US-PATENT-CLASS-244-1SA	c15	N73-25513
US-PATENT-CLASS-239-543	c28	N72-23809	US-PATENT-CLASS-244-1SA	c21	N73-30640
US-PATENT-CLASS-240-1.2	c11	N70-33329	US-PATENT-CLASS-244-1SA	c19	N74-15089
US-PATENT-CLASS-240-11.2	c09	N71-26787	US-PATENT-CLASS-244-1SA	c35	N74-28097
US-PATENT-CLASS-240-11.4	c09	N71-26787	US-PATENT-CLASS-244-1SB	c15	N73-12486
US-PATENT-CLASS-240-41.35B	c74	N77-21941	US-PATENT-CLASS-244-1SC	c31	N73-32750
US-PATENT-CLASS-240-41B	c36	N75-27364	US-PATENT-CLASS-244-1SC	c34	N75-12222
US-PATENT-CLASS-240-41B	c74	N77-21941	US-PATENT-CLASS-244-1SD	c31	N73-26876
US-PATENT-CLASS-240-46.13	c74	N77-21941	US-PATENT-CLASS-244-1SD	c37	N74-27903
US-PATENT-CLASS-240-47	c34	N74-23066	US-PATENT-CLASS-244-1SD	c15	N77-10112
US-PATENT-CLASS-240-51.11	c09	N71-26787	US-PATENT-CLASS-244-1SS	c11	N73-13257
US-PATENT-CLASS-242-54	c15	N72-18477	US-PATENT-CLASS-244-1SS	c03	N73-20039
US-PATENT-CLASS-242-55.19	c14	N70-41647	US-PATENT-CLASS-244-1SS	c14	N73-27378
US-PATENT-CLASS-242-55.19	c07	N71-10609	US-PATENT-CLASS-244-1SS	c31	N73-30829
US-PATENT-CLASS-242-57	c37	N77-14479	US-PATENT-CLASS-244-1SS	c31	N73-32750
US-PATENT-CLASS-242-187	c37	N77-14479	US-PATENT-CLASS-244-1SS	c33	N73-32818
US-PATENT-CLASS-242-192	c14	N71-23698	US-PATENT-CLASS-244-1SS	c18	N74-22136
US-PATENT-CLASS-242-193	c37	N77-14479	US-PATENT-CLASS-244-1SS	c18	N74-27397
US-PATENT-CLASS-242-204	c37	N77-14479	US-PATENT-CLASS-244-1SS	c73	N75-30876
US-PATENT-CLASS-242-210	c37	N77-14479	US-PATENT-CLASS-244-3.14	c31	N71-17691
US-PATENT-CLASS-244-1SS	c03	N72-20031	US-PATENT-CLASS-244-3.16	c19	N74-15089
US-PATENT-CLASS-244-1	c31	N69-27499	US-PATENT-CLASS-244-3.21	c30	N72-17873
US-PATENT-CLASS-244-1	c03	N70-33343	US-PATENT-CLASS-244-3.21	c15	N76-14158
US-PATENT-CLASS-244-1	c33	N70-33344	US-PATENT-CLASS-244-3.21	c15	N77-10113
US-PATENT-CLASS-244-1	c03	N70-34157	US-PATENT-CLASS-244-3.21	c35	N77-20399
US-PATENT-CLASS-244-1	c31	N70-34176	US-PATENT-CLASS-244-3.22	c31	N71-17629
US-PATENT-CLASS-244-1	c21	N70-34295	US-PATENT-CLASS-244-3.22	c28	N72-22769
US-PATENT-CLASS-244-1	c31	N70-34296	US-PATENT-CLASS-244-3.22	c20	N76-21275
US-PATENT-CLASS-244-1	c21	N70-35395	US-PATENT-CLASS-244-4	c05	N69-21380
US-PATENT-CLASS-244-1	c31	N70-36410	US-PATENT-CLASS-244-4	c05	N71-12336
US-PATENT-CLASS-244-1	c33	N70-36617	US-PATENT-CLASS-244-4	c28	N71-27585
US-PATENT-CLASS-244-1	c21	N70-36943	US-PATENT-CLASS-244-12	c02	N70-33332
US-PATENT-CLASS-244-1	c31	N70-37924	US-PATENT-CLASS-244-13	c01	N71-23497
US-PATENT-CLASS-244-1	c31	N70-37938	US-PATENT-CLASS-244-13	c02	N73-36005
US-PATENT-CLASS-244-1	c31	N70-37986	US-PATENT-CLASS-244-13	c05	N75-25914
US-PATENT-CLASS-244-1	c31	N70-38676	US-PATENT-CLASS-244-14	c14	N70-33322
US-PATENT-CLASS-244-1	c30	N70-40016	US-PATENT-CLASS-244-15	c05	N75-25914
US-PATENT-CLASS-244-1	c31	N70-41373	US-PATENT-CLASS-244-15.5	c31	N72-18859
US-PATENT-CLASS-244-1	c31	N70-41588	US-PATENT-CLASS-244-16	c02	N70-41863
US-PATENT-CLASS-244-1	c31	N70-41631	US-PATENT-CLASS-244-17.13	c02	N73-19004
US-PATENT-CLASS-244-1	c31	N70-41855	US-PATENT-CLASS-244-23	c02	N71-11039
US-PATENT-CLASS-244-1	c21	N70-41856	US-PATENT-CLASS-244-23A	c21	N72-25595
US-PATENT-CLASS-244-1	c31	N70-42075	US-PATENT-CLASS-244-23D	c34	N76-18364
US-PATENT-CLASS-244-1	c03	N71-11058	US-PATENT-CLASS-244-31	c02	N71-11037
US-PATENT-CLASS-244-1	c33	N71-14035	US-PATENT-CLASS-244-31	c31	N71-16081
US-PATENT-CLASS-244-1	c21	N71-14132	US-PATENT-CLASS-244-31	c34	N74-23039
US-PATENT-CLASS-244-1	c21	N71-14159	US-PATENT-CLASS-244-32	c02	N73-13008
US-PATENT-CLASS-244-1	c21	N71-15583	US-PATENT-CLASS-244-35	c01	N71-13410
US-PATENT-CLASS-244-1	c31	N71-15663	US-PATENT-CLASS-244-35B	c02	N76-22154
US-PATENT-CLASS-244-1	c31	N71-15674	US-PATENT-CLASS-244-40B	c02	N76-22154
US-PATENT-CLASS-244-1	c31	N71-15676	US-PATENT-CLASS-244-42	c02	N70-42016
US-PATENT-CLASS-244-1	c02	N71-16087	US-PATENT-CLASS-244-42	c02	N71-26110

NUMBER INDEX

US-PATENT-CLASS-244-42CG	c33	N77-10429	US-PATENT-CLASS-244-162	c18	N75-19329
US-PATENT-CLASS-244-42DA	c05	N75-25914	US-PATENT-CLASS-244-162	c18	N76-17185
US-PATENT-CLASS-244-43	c02	N70-33255	US-PATENT-CLASS-244-163	c37	N76-19437
US-PATENT-CLASS-244-43	c02	N71-11043	US-PATENT-CLASS-244-165	c15	N76-14158
US-PATENT-CLASS-244-44	c02	N71-11038	US-PATENT-CLASS-244-165	c35	N77-20399
US-PATENT-CLASS-244-45	c02	N71-12243	US-PATENT-CLASS-244-165	c15	N77-10113
US-PATENT-CLASS-244-46	c02	N70-33266	US-PATENT-CLASS-244-171	c15	N77-10113
US-PATENT-CLASS-244-46	c02	N70-33286	US-PATENT-CLASS-244-171	c35	N77-20399
US-PATENT-CLASS-244-46	c02	N70-34178	US-PATENT-CLASS-244-172	c18	N76-17185
US-PATENT-CLASS-244-46	c02	N70-34858	US-PATENT-CLASS-244-173	c44	N75-22581
US-PATENT-CLASS-244-46	c31	N70-38010	US-PATENT-CLASS-244-327	c08	N74-30421
US-PATENT-CLASS-244-46	c02	N70-38011	US-PATENT-CLASS-247-171	c35	N75-23910
US-PATENT-CLASS-244-46	c02	N71-11041	US-PATENT-CLASS-248-14	c15	N72-17454
US-PATENT-CLASS-244-46	c02	N73-26005	US-PATENT-CLASS-248-16	c18	N74-27397
US-PATENT-CLASS-244-46	c05	N76-29217	US-PATENT-CLASS-248-18	c14	N69-27466
US-PATENT-CLASS-244-50	c02	N70-34160	US-PATENT-CLASS-248-18	c15	N72-11391
US-PATENT-CLASS-244-51	c02	N70-34856	US-PATENT-CLASS-248-20	c15	N72-11391
US-PATENT-CLASS-244-53	c28	N71-15563	US-PATENT-CLASS-248-22	c19	N76-22284
US-PATENT-CLASS-244-53B	c02	N74-20646	US-PATENT-CLASS-248-23	c18	N74-27397
US-PATENT-CLASS-244-53B	c07	N75-24736	US-PATENT-CLASS-248-27	c15	N71-20813
US-PATENT-CLASS-244-53B	c07	N77-18154	US-PATENT-CLASS-248-119	c11	N70-35383
US-PATENT-CLASS-244-55	c02	N73-26005	US-PATENT-CLASS-248-178	c15	N70-41310
US-PATENT-CLASS-244-55	c05	N75-25914	US-PATENT-CLASS-248-183	c14	N71-26627
US-PATENT-CLASS-244-57	c15	N71-26611	US-PATENT-CLASS-248-183	c15	N72-11386
US-PATENT-CLASS-244-63	c09	N77-19076	US-PATENT-CLASS-248-188.4	c15	N72-27484
US-PATENT-CLASS-244-75A	c02	N73-26004	US-PATENT-CLASS-248-188.9	c31	N70-34159
US-PATENT-CLASS-244-75R	c05	N75-12930	US-PATENT-CLASS-248-278	c15	N72-11386
US-PATENT-CLASS-244-76	c21	N70-34539	US-PATENT-CLASS-248-317	c11	N69-27466
US-PATENT-CLASS-244-76	c02	N71-13422	US-PATENT-CLASS-248-346	c14	N70-39898
US-PATENT-CLASS-244-76	c02	N71-20570	US-PATENT-CLASS-248-358	c15	N70-40156
US-PATENT-CLASS-244-76C	c02	N73-26004	US-PATENT-CLASS-248-358	c23	N71-15673
US-PATENT-CLASS-244-77	c32	N71-23971	US-PATENT-CLASS-248-358	c15	N71-24694
US-PATENT-CLASS-244-77A	c04	N74-13420	US-PATENT-CLASS-248-358R	c37	N75-18573
US-PATENT-CLASS-244-77B	c04	N74-13420	US-PATENT-CLASS-248-358R	c19	N76-22284
US-PATENT-CLASS-244-77D	c02	N73-19004	US-PATENT-CLASS-248-360	c15	N71-17649
US-PATENT-CLASS-244-77F	c02	N73-26004	US-PATENT-CLASS-248-361	c05	N71-28619
US-PATENT-CLASS-244-77G	c02	N73-26004	US-PATENT-CLASS-248-362	c37	N76-21554
US-PATENT-CLASS-244-79	c04	N76-26175	US-PATENT-CLASS-248-363	c37	N76-21554
US-PATENT-CLASS-244-83	c21	N70-33279	US-PATENT-CLASS-248-487	c15	N72-11386
US-PATENT-CLASS-244-83	c15	N71-23255	US-PATENT-CLASS-249-59	c31	N75-13111
US-PATENT-CLASS-244-83	c31	N71-33160	US-PATENT-CLASS-249-83	c31	N74-32920
US-PATENT-CLASS-244-83	c08	N74-10942	US-PATENT-CLASS-249-95	c31	N74-32920
US-PATENT-CLASS-244-83R	c05	N75-12930	US-PATENT-CLASS-249-144	c31	N75-13111
US-PATENT-CLASS-244-90	c02	N71-27088	US-PATENT-CLASS-249-145	c31	N74-32920
US-PATENT-CLASS-244-90R	c08	N74-30421	US-PATENT-CLASS-249-145	c31	N75-13111
US-PATENT-CLASS-244-91	c08	N74-30421	US-PATENT-CLASS-249-184	c31	N74-32920
US-PATENT-CLASS-244-100	c15	N70-34850	US-PATENT-CLASS-250-41.9	c06	N71-13461
US-PATENT-CLASS-244-100	c31	N70-36654	US-PATENT-CLASS-250-41.9	c24	N71-16095
US-PATENT-CLASS-244-100	c31	N70-36845	US-PATENT-CLASS-250-41.9	c14	N71-23041
US-PATENT-CLASS-244-100	c02	N70-41589	US-PATENT-CLASS-250-41.9	c14	N71-28863
US-PATENT-CLASS-244-103	c02	N70-36825	US-PATENT-CLASS-250-41.9	c14	N72-17328
US-PATENT-CLASS-244-113	c02	N70-37939	US-PATENT-CLASS-250-41.9	c14	N73-32325
US-PATENT-CLASS-244-113	c31	N71-25434	US-PATENT-CLASS-250-41.9D	c14	N72-29464
US-PATENT-CLASS-244-113	c02	N77-10001	US-PATENT-CLASS-250-41.9G	c14	N73-12444
US-PATENT-CLASS-244-114	c21	N72-22619	US-PATENT-CLASS-250-41.9S	c14	N73-12444
US-PATENT-CLASS-244-117	c31	N70-33242	US-PATENT-CLASS-250-41.9S	c14	N71-28992
US-PATENT-CLASS-244-117	c33	N72-17947	US-PATENT-CLASS-250-43.5	c27	N71-16348
US-PATENT-CLASS-244-117A	c33	N73-25952	US-PATENT-CLASS-250-43.5	c15	N71-24896
US-PATENT-CLASS-244-117A	c34	N76-17317	US-PATENT-CLASS-250-43.5	c14	N71-25901
US-PATENT-CLASS-244-117A	c37	N76-19437	US-PATENT-CLASS-250-43.5FC	c14	N72-11365
US-PATENT-CLASS-244-117A	c34	N77-18382	US-PATENT-CLASS-250-43.5R	c14	N71-27090
US-PATENT-CLASS-244-122	c05	N71-20718	US-PATENT-CLASS-250-43.5R	c14	N72-21408
US-PATENT-CLASS-244-123	c24	N77-28225	US-PATENT-CLASS-250-43.5R	c06	N72-25146
US-PATENT-CLASS-244-127	c34	N74-23039	US-PATENT-CLASS-250-43.5R	c06	N72-31141
US-PATENT-CLASS-244-130	c02	N77-10001	US-PATENT-CLASS-250-49.5	c14	N69-39982
US-PATENT-CLASS-244-135	c31	N70-42015	US-PATENT-CLASS-250-49.5	c14	N71-28863
US-PATENT-CLASS-244-135	c15	N73-12486	US-PATENT-CLASS-250-49.5	c14	N72-17328
US-PATENT-CLASS-244-135	c14	N73-27378	US-PATENT-CLASS-250-49.5B	c24	N72-11595
US-PATENT-CLASS-244-135R	c34	N76-17317	US-PATENT-CLASS-250-49.5TE	c24	N72-11595
US-PATENT-CLASS-244-137P	c31	N73-26876	US-PATENT-CLASS-250-51	c24	N72-11595
US-PATENT-CLASS-244-137P	c37	N76-22540	US-PATENT-CLASS-250-51.5	c23	N73-13662
US-PATENT-CLASS-244-138	c01	N69-39981	US-PATENT-CLASS-250-51.5	c14	N73-28491
US-PATENT-CLASS-244-138	c02	N70-41630	US-PATENT-CLASS-250-52	c15	N71-15606
US-PATENT-CLASS-244-138	c31	N71-16085	US-PATENT-CLASS-250-52	c11	N71-23042
US-PATENT-CLASS-244-138	c31	N71-25434	US-PATENT-CLASS-250-52	c24	N72-11595
US-PATENT-CLASS-244-138	c31	N71-28851	US-PATENT-CLASS-250-52	c23	N73-13662
US-PATENT-CLASS-244-139	c31	N73-13898	US-PATENT-CLASS-250-65P	c15	N72-25452
US-PATENT-CLASS-244-139	c02	N76-16014	US-PATENT-CLASS-250-65R	c14	N73-30389
US-PATENT-CLASS-244-140	c02	N70-38009	US-PATENT-CLASS-250-71	c14	N70-41676
US-PATENT-CLASS-244-145	c02	N74-10034	US-PATENT-CLASS-250-71.5	c14	N72-17328
US-PATENT-CLASS-244-150	c15	N71-24600	US-PATENT-CLASS-250-71.5R	c14	N72-29464
US-PATENT-CLASS-244-151R	c33	N74-22865	US-PATENT-CLASS-250-71R	c06	N73-16106
US-PATENT-CLASS-244-152	c02	N70-36804	US-PATENT-CLASS-250-83	c14	N69-27484
US-PATENT-CLASS-244-155	c30	N73-12884	US-PATENT-CLASS-250-83	c14	N69-39937
US-PATENT-CLASS-244-155	c31	N73-14854	US-PATENT-CLASS-250-83	c09	N71-18830
US-PATENT-CLASS-244-158	c37	N76-22540	US-PATENT-CLASS-250-83	c05	N71-19440
US-PATENT-CLASS-244-161	c18	N76-14186	US-PATENT-CLASS-250-83	c14	N71-20430
US-PATENT-CLASS-244-161	c37	N76-22540	US-PATENT-CLASS-250-83	c14	N71-23401
US-PATENT-CLASS-244-161	c37	N77-23483	US-PATENT-CLASS-250-83	c09	N71-27232

NUMBER INDEX

US-PATENT-CLASS-250-83.3	c21 N70-33181	US-PATENT-CLASS-250-211J	c09 N72-17152
US-PATENT-CLASS-250-83.3	c21 N70-34297	US-PATENT-CLASS-250-211J	c09 N73-14214
US-PATENT-CLASS-250-83.3	c14 N71-15599	US-PATENT-CLASS-250-211J	c35 N74-15090
US-PATENT-CLASS-250-83.3	c14 N71-18699	US-PATENT-CLASS-250-211K	c74 N77-22951
US-PATENT-CLASS-250-83.3	c14 N71-21088	US-PATENT-CLASS-250-211R	c36 N75-19652
US-PATENT-CLASS-250-83.3	c09 N71-22985	US-PATENT-CLASS-250-212	c35 N75-23910
US-PATENT-CLASS-250-83.3	c14 N71-25901	US-PATENT-CLASS-250-212	c03 N71-23354
US-PATENT-CLASS-250-83.3	c14 N71-26475	US-PATENT-CLASS-250-212	c03 N73-20040
US-PATENT-CLASS-250-83.3	c14 N71-27323	US-PATENT-CLASS-250-214	c09 N73-32109
US-PATENT-CLASS-250-83.3	c14 N72-17328	US-PATENT-CLASS-250-214	c14 N73-25462
US-PATENT-CLASS-250-83.3	c35 N75-27329	US-PATENT-CLASS-250-214	c14 N73-25462
US-PATENT-CLASS-250-83.3H	c14 N72-21408	US-PATENT-CLASS-250-214A	c35 N74-15090
US-PATENT-CLASS-250-83.3H	c14 N72-24477	US-PATENT-CLASS-250-214H	c33 N77-14335
US-PATENT-CLASS-250-83.3H	c14 N73-12445	US-PATENT-CLASS-250-215	c14 N73-28490
US-PATENT-CLASS-250-83.3H	c14 N73-20475	US-PATENT-CLASS-250-217	c14 N73-16483
US-PATENT-CLASS-250-83.3H	c14 N73-25462	US-PATENT-CLASS-250-217	c14 N69-39896
US-PATENT-CLASS-250-83.3H	c14 N73-12445	US-PATENT-CLASS-250-217	c14 N73-16483
US-PATENT-CLASS-250-83.3H	c14 N73-20477	US-PATENT-CLASS-250-217F	c36 N74-13205
US-PATENT-CLASS-250-83.3H	c14 N73-32317	US-PATENT-CLASS-250-217F	c14 N73-16484
US-PATENT-CLASS-250-83.3OV	c10 N72-17173	US-PATENT-CLASS-250-217SS	c14 N73-19419
US-PATENT-CLASS-250-83.3OV	c14 N72-25409	US-PATENT-CLASS-250-217SS	c09 N73-14214
US-PATENT-CLASS-250-83.3OV	c06 N73-16106	US-PATENT-CLASS-250-218	c36 N74-15145
US-PATENT-CLASS-250-83.6	c10 N70-41991	US-PATENT-CLASS-250-218	c14 N71-22996
US-PATENT-CLASS-250-83.6R	c14 N71-27090	US-PATENT-CLASS-250-219	c14 N71-28994
US-PATENT-CLASS-250-83.6R	c14 N72-20381	US-PATENT-CLASS-250-219DP	c14 N71-28993
US-PATENT-CLASS-250-83.6R	c25 N72-33696	US-PATENT-CLASS-250-219TH	c91 N74-13130
US-PATENT-CLASS-250-83CD	c91 N74-13130	US-PATENT-CLASS-250-225	c26 N73-26751
US-PATENT-CLASS-250-83R	c14 N73-12445	US-PATENT-CLASS-250-225	c14 N71-24864
US-PATENT-CLASS-250-83R	c14 N73-20477	US-PATENT-CLASS-250-226	c14 N72-27409
US-PATENT-CLASS-250-84	c14 N71-24809	US-PATENT-CLASS-250-227	c14 N72-25409
US-PATENT-CLASS-250-1C5	c14 N70-40240	US-PATENT-CLASS-250-227	c14 N71-22991
US-PATENT-CLASS-250-105	c14 N73-30389	US-PATENT-CLASS-250-227	c14 N71-23240
US-PATENT-CLASS-250-199	c16 N69-27491	US-PATENT-CLASS-250-229	c60 N77-14751
US-PATENT-CLASS-250-199	c07 N71-12389	US-PATENT-CLASS-250-231	c08 N73-30135
US-PATENT-CLASS-250-199	c16 N71-22895	US-PATENT-CLASS-250-231SE	c14 N73-20475
US-PATENT-CLASS-250-199	c16 N71-25914	US-PATENT-CLASS-250-232	c74 N74-21304
US-PATENT-CLASS-250-199	c16 N71-27183	US-PATENT-CLASS-250-233	c23 N71-21821
US-PATENT-CLASS-250-199	c16 N71-28963	US-PATENT-CLASS-250-234	c23 N71-16100
US-PATENT-CLASS-250-199	c16 N73-16536	US-PATENT-CLASS-250-235	c03 N73-20040
US-PATENT-CLASS-250-199	c07 N73-26119	US-PATENT-CLASS-250-236	c14 N72-11364
US-PATENT-CLASS-250-199	c74 N76-18913	US-PATENT-CLASS-250-237	c21 N73-30640
US-PATENT-CLASS-250-199	c74 N76-30053	US-PATENT-CLASS-250-237R	c14 N69-24331
US-PATENT-CLASS-250-199	c74 N77-26942	US-PATENT-CLASS-250-238	c08 N73-30135
US-PATENT-CLASS-250-199	c32 N77-28346	US-PATENT-CLASS-250-238	c19 N74-15089
US-PATENT-CLASS-250-199	c60 N77-32731	US-PATENT-CLASS-250-239	c33 N75-31342
US-PATENT-CLASS-250-201	c14 N70-40238	US-PATENT-CLASS-250-251	c32 N77-28346
US-PATENT-CLASS-250-201	c35 N75-15014	US-PATENT-CLASS-250-281	c08 N73-30135
US-PATENT-CLASS-250-203	c14 N69-27432	US-PATENT-CLASS-250-281	c35 N76-15431
US-PATENT-CLASS-250-203	c14 N69-27485	US-PATENT-CLASS-250-282	c35 N74-34857
US-PATENT-CLASS-250-203	c07 N69-39736	US-PATENT-CLASS-250-283	c35 N76-16393
US-PATENT-CLASS-250-203	c14 N70-34158	US-PATENT-CLASS-250-287	c36 N77-26477
US-PATENT-CLASS-250-203	c21 N70-35089	US-PATENT-CLASS-250-287	c36 N77-26477
US-PATENT-CLASS-250-203	c14 N70-40239	US-PATENT-CLASS-250-288	c35 N76-15431
US-PATENT-CLASS-250-203	c21 N71-10678	US-PATENT-CLASS-250-288	c35 N76-16393
US-PATENT-CLASS-250-203	c21 N71-10771	US-PATENT-CLASS-250-289	c35 N77-32456
US-PATENT-CLASS-250-203	c21 N71-15642	US-PATENT-CLASS-250-290	c35 N77-14406
US-PATENT-CLASS-250-203	c14 N71-19568	US-PATENT-CLASS-250-291	c35 N71-10492
US-PATENT-CLASS-250-203	c14 N71-23269	US-PATENT-CLASS-250-295	c35 N77-10492
US-PATENT-CLASS-250-203	c14 N71-23797	US-PATENT-CLASS-250-298	c35 N74-34857
US-PATENT-CLASS-250-203	c14 N72-22444	US-PATENT-CLASS-250-304	c35 N77-14406
US-PATENT-CLASS-250-203	c14 N73-30393	US-PATENT-CLASS-250-332	c25 N74-26947
US-PATENT-CLASS-250-203	c35 N75-23910	US-PATENT-CLASS-250-335	c35 N75-19613
US-PATENT-CLASS-250-203R	c14 N72-27409	US-PATENT-CLASS-250-336	c34 N76-18374
US-PATENT-CLASS-250-203R	c14 N73-25462	US-PATENT-CLASS-250-336	c14 N73-28488
US-PATENT-CLASS-250-203R	c14 N73-28490	US-PATENT-CLASS-250-336	c35 N76-15433
US-PATENT-CLASS-250-203R	c21 N73-30640	US-PATENT-CLASS-250-338	c32 N76-27473
US-PATENT-CLASS-250-203R	c19 N74-15089	US-PATENT-CLASS-250-338	c35 N74-18088
US-PATENT-CLASS-250-203R	c89 N74-30886	US-PATENT-CLASS-250-338	c35 N77-10493
US-PATENT-CLASS-250-203R	c35 N77-20401	US-PATENT-CLASS-250-339	c47 N77-10753
US-PATENT-CLASS-250-203R	c74 N77-22951	US-PATENT-CLASS-250-340	c35 N77-10493
US-PATENT-CLASS-250-203X	c16 N72-13437	US-PATENT-CLASS-250-343	c35 N76-29551
US-PATENT-CLASS-250-204	c36 N74-21091	US-PATENT-CLASS-250-343	c35 N74-11284
US-PATENT-CLASS-250-205	c14 N72-27411	US-PATENT-CLASS-250-343	c25 N74-26947
US-PATENT-CLASS-250-205	c09 N73-14214	US-PATENT-CLASS-250-343	c45 N75-27585
US-PATENT-CLASS-250-205	c36 N74-13205	US-PATENT-CLASS-250-344	c74 N76-20958
US-PATENT-CLASS-250-206	c10 N71-20782	US-PATENT-CLASS-250-344	c25 N76-22323
US-PATENT-CLASS-250-207	c14 N71-21040	US-PATENT-CLASS-250-345	c45 N75-27585
US-PATENT-CLASS-250-207	c14 N72-17328	US-PATENT-CLASS-250-347	c35 N77-10493
US-PATENT-CLASS-250-207	c14 N73-32317	US-PATENT-CLASS-250-351	c47 N77-10753
US-PATENT-CLASS-250-207	c33 N74-27682	US-PATENT-CLASS-250-353	c35 N75-30502
US-PATENT-CLASS-250-208	c14 N72-20379	US-PATENT-CLASS-250-359	c35 N76-29551
US-PATENT-CLASS-250-209	c07 N69-39980	US-PATENT-CLASS-250-360	c37 N75-26372
US-PATENT-CLASS-250-209	c20 N71-16340	US-PATENT-CLASS-250-361	c35 N74-15091
US-PATENT-CLASS-250-209	c10 N72-17173		c35 N74-15091
US-PATENT-CLASS-250-209	c14 N72-25409		
US-PATENT-CLASS-250-209	c14 N73-16483		
US-PATENT-CLASS-250-209	c14 N73-26432		
US-PATENT-CLASS-250-209	c14 N73-29490		
US-PATENT-CLASS-250-209	c21 N73-30640		

NUMBER INDEX

US-PATENT-CLASS-250-363R	c52 N77-14737	US-PATENT-CLASS-252-62.36A	c25 N75-26043
US-PATENT-CLASS-250-369	c35 N74-15091	US-PATENT-CLASS-252-70	c23 N75-14834
US-PATENT-CLASS-250-370	c35 N74-18088	US-PATENT-CLASS-252-300	c14 N72-22443
US-PATENT-CLASS-250-370	c33 N75-31332	US-PATENT-CLASS-252-300	c24 N76-24363
US-PATENT-CLASS-250-371	c35 N74-18088	US-PATENT-CLASS-252-301.2	c18 N71-27170
US-PATENT-CLASS-250-372	c19 N74-29410	US-PATENT-CLASS-252-301.4	c06 N73-30097
US-PATENT-CLASS-250-372	c24 N76-24363	US-PATENT-CLASS-252-305	c06 N73-30097
US-PATENT-CLASS-250-372	c33 N76-27473	US-PATENT-CLASS-252-359A	c37 N77-13418
US-PATENT-CLASS-250-373	c25 N74-26947	US-PATENT-CLASS-252-373	c44 N76-29704
US-PATENT-CLASS-250-373	c35 N75-30502	US-PATENT-CLASS-252-373	c44 N77-10636
US-PATENT-CLASS-250-373	c45 N76-17656	US-PATENT-CLASS-252-408	c14 N73-14428
US-PATENT-CLASS-250-374	c35 N74-26949	US-PATENT-CLASS-252-431N	c06 N73-32029
US-PATENT-CLASS-250-385	c35 N74-26949	US-PATENT-CLASS-252-431R	c06 N73-32029
US-PATENT-CLASS-250-385	c35 N75-27331	US-PATENT-CLASS-252-514	c05 N72-25120
US-PATENT-CLASS-250-385	c35 N76-15433	US-PATENT-CLASS-252-549	c23 N75-14834
US-PATENT-CLASS-250-394	c35 N76-16393	US-PATENT-CLASS-253-39.1	c33 N71-29152
US-PATENT-CLASS-250-394	c14 N73-30392	US-PATENT-CLASS-253-39.15	c15 N70-33226
US-PATENT-CLASS-250-394	c19 N74-29410	US-PATENT-CLASS-253-39.15	c15 N70-33264
US-PATENT-CLASS-250-396	c35 N77-14408	US-PATENT-CLASS-253-39.15	c28 N70-33372
US-PATENT-CLASS-250-400	c25 N76-29379	US-PATENT-CLASS-253-66	c15 N70-36414
US-PATENT-CLASS-250-423	c35 N76-15431	US-PATENT-CLASS-253-66	c28 N70-39895
US-PATENT-CLASS-250-423	c35 N76-16393	US-PATENT-CLASS-253-77	c28 N71-28928
US-PATENT-CLASS-250-423P	c36 N77-26477	US-PATENT-CLASS-253-77	c28 N71-29154
US-PATENT-CLASS-250-429	c25 N76-29379	US-PATENT-CLASS-253-317	c44 N77-22606
US-PATENT-CLASS-250-432	c45 N75-27585	US-PATENT-CLASS-254-29A	c15 N73-30457
US-PATENT-CLASS-250-432R	c25 N76-22323	US-PATENT-CLASS-254-93R	c35 N74-13129
US-PATENT-CLASS-250-444	c52 N77-14737	US-PATENT-CLASS-254-93R	c20 N76-22296
US-PATENT-CLASS-250-460	c37 N75-26372	US-PATENT-CLASS-254-124	c20 N76-22296
US-PATENT-CLASS-250-489	c35 N76-15433	US-PATENT-CLASS-254-150	c15 N71-24599
US-PATENT-CLASS-250-492	c35 N74-15091	US-PATENT-CLASS-254-156	c15 N73-25512
US-PATENT-CLASS-250-492	c37 N75-26372	US-PATENT-CLASS-254-158	c54 N77-21844
US-PATENT-CLASS-250-492R	c25 N76-29379	US-PATENT-CLASS-254-173	c15 N71-24599
US-PATENT-CLASS-250-493	c73 N75-30876	US-PATENT-CLASS-254-186	c15 N71-24599
US-PATENT-CLASS-250-495	c74 N75-12732	US-PATENT-CLASS-254-190	c15 N72-25453
US-PATENT-CLASS-250-496	c73 N75-30876	US-PATENT-CLASS-259-DIG.18	c35 N74-15093
US-PATENT-CLASS-250-498	c52 N77-14737	US-PATENT-CLASS-259-4	c15 N73-19458
US-PATENT-CLASS-250-499	c73 N74-26767	US-PATENT-CLASS-259-4AC	c37 N76-19436
US-PATENT-CLASS-250-499	c72 N76-15860	US-PATENT-CLASS-259-60	c35 N74-15093
US-PATENT-CLASS-250-500	c72 N76-15860	US-PATENT-CLASS-259-71	c15 N71-21177
US-PATENT-CLASS-250-505	c74 N74-27866	US-PATENT-CLASS-259-72	c37 N74-18123
US-PATENT-CLASS-250-505	c35 N75-19616	US-PATENT-CLASS-259-98	c35 N74-15126
US-PATENT-CLASS-250-508	c35 N75-19616	US-PATENT-CLASS-259-98R	c34 N77-24423
US-PATENT-CLASS-250-510	c35 N75-19616	US-PATENT-CLASS-260.46.5E	c27 N74-21156
US-PATENT-CLASS-250-511	c74 N74-27866	US-PATENT-CLASS-260-DIG.24	c27 N74-27037
US-PATENT-CLASS-250-518	c14 N73-30392	US-PATENT-CLASS-260-DIG.24	c27 N76-24405
US-PATENT-CLASS-250-527	c37 N76-18458	US-PATENT-CLASS-260-2	c06 N71-11243
US-PATENT-CLASS-250-527	c25 N77-32255	US-PATENT-CLASS-260-2	c06 N71-20717
US-PATENT-CLASS-250-527	c44 N77-32580	US-PATENT-CLASS-260-2	c06 N71-20905
US-PATENT-CLASS-250-566	c74 N75-25706	US-PATENT-CLASS-260-2	c06 N71-27363
US-PATENT-CLASS-250-573	c74 N76-20958	US-PATENT-CLASS-260-2	c06 N73-30102
US-PATENT-CLASS-250-574	c45 N76-21742	US-PATENT-CLASS-260-2.1E	c18 N72-22567
US-PATENT-CLASS-250-574	c36 N77-25501	US-PATENT-CLASS-260-2.5	c06 N71-11242
US-PATENT-CLASS-250-576	c35 N74-27860	US-PATENT-CLASS-260-2.5	c06 N71-24739
US-PATENT-CLASS-250-578	c36 N75-19652	US-PATENT-CLASS-260-2.5	c06 N71-25929
US-PATENT-CLASS-251-11	c15 N70-35407	US-PATENT-CLASS-260-2.5	c18 N71-26155
US-PATENT-CLASS-251-31	c15 N71-19485	US-PATENT-CLASS-260-2.5	c06 N72-25150
US-PATENT-CLASS-251-61	c15 N71-10778	US-PATENT-CLASS-260-2.5A	c27 N77-31308
US-PATENT-CLASS-251-61.1	c12 N71-18615	US-PATENT-CLASS-260-2.5AK	c27 N76-15310
US-PATENT-CLASS-251-86	c15 N72-31483	US-PATENT-CLASS-260-2.5AN	c27 N74-12812
US-PATENT-CLASS-251-118	c15 N71-18580	US-PATENT-CLASS-260-2.5AN	c27 N77-31308
US-PATENT-CLASS-251-120	c37 N74-21065	US-PATENT-CLASS-260-2.5AY	c27 N77-31308
US-PATENT-CLASS-251-121	c15 N71-18580	US-PATENT-CLASS-260-2.5P	c18 N73-13562
US-PATENT-CLASS-251-122	c15 N73-13462	US-PATENT-CLASS-260-2.5PP	c06 N72-25147
US-PATENT-CLASS-251-122	c37 N74-21065	US-PATENT-CLASS-260-2.5FP	c27 N74-27037
US-PATENT-CLASS-251-127	c12 N71-18615	US-PATENT-CLASS-260-2.5L	c27 N74-12814
US-PATENT-CLASS-251-129	c15 N72-20442	US-PATENT-CLASS-260-2.5R	c27 N74-27037
US-PATENT-CLASS-251-148	c15 N71-23024	US-PATENT-CLASS-260-2R	c37 N74-18126
US-PATENT-CLASS-251-149.6	c37 N76-14463	US-PATENT-CLASS-260-2R	c27 N74-27037
US-PATENT-CLASS-251-172	c15 N71-21234	US-PATENT-CLASS-260-18S	c06 N72-25151
US-PATENT-CLASS-251-173	c15 N70-33376	US-PATENT-CLASS-260-29.6	c26 N75-27125
US-PATENT-CLASS-251-210	c37 N74-21065	US-PATENT-CLASS-260-29.6S	c27 N74-17283
US-PATENT-CLASS-251-331	c15 N72-31483	US-PATENT-CLASS-260-30.2	c06 N73-27980
US-PATENT-CLASS-251-333	c15 N70-34859	US-PATENT-CLASS-260-30.8DS	c06 N73-27980
US-PATENT-CLASS-251-333	c12 N71-18615	US-PATENT-CLASS-260-32.6F	c06 N73-27980
US-PATENT-CLASS-251-333	c15 N72-20442	US-PATENT-CLASS-260-32.6N	c23 N76-15268
US-PATENT-CLASS-251-333	c37 N75-25185	US-PATENT-CLASS-260-32.8N	c23 N76-15268
US-PATENT-CLASS-251-342	c12 N71-18615	US-PATENT-CLASS-260-33.4R	c06 N73-27980
US-PATENT-CLASS-251-358	c15 N71-17648	US-PATENT-CLASS-260-33.6R	c06 N73-27980
US-PATENT-CLASS-251-360	c15 N72-25451	US-PATENT-CLASS-260-33.8P	c27 N76-24405
US-PATENT-CLASS-252-8.1	c18 N73-26572	US-PATENT-CLASS-260-37	c18 N71-25881
US-PATENT-CLASS-252-8.1	c27 N74-27037	US-PATENT-CLASS-260-45.7	c27 N76-24405
US-PATENT-CLASS-252-12	c15 N71-23810	US-PATENT-CLASS-260-46.5	c06 N71-11237
US-PATENT-CLASS-252-12	c24 N76-22309	US-PATENT-CLASS-260-46.5	c06 N71-11240
US-PATENT-CLASS-252-26	c15 N71-21403	US-PATENT-CLASS-260-46.5E	c06 N72-25151
US-PATENT-CLASS-252-26	c15 N71-24046	US-PATENT-CLASS-260-46.5G	c06 N72-25151
US-PATENT-CLASS-252-58	c18 N70-39897	US-PATENT-CLASS-260-46.5P	c06 N72-25151
US-PATENT-CLASS-252-62	c27 N74-27037	US-PATENT-CLASS-260-46.5R	c06 N73-26100
US-PATENT-CLASS-252-62.3	c26 N71-23292	US-PATENT-CLASS-260-47	c06 N71-28620
US-PATENT-CLASS-252-62.3	c76 N76-25049	US-PATENT-CLASS-260-47	c06 N71-28807

NUMBER INDEX

US-PATENT-CLASS-260-47CP	c06	N73-27980	US-PATENT-CLASS-264-217	c25	N75-12087
US-PATENT-CLASS-260-47CP	c23	N76-15268	US-PATENT-CLASS-264-219	c37	N76-31524
US-PATENT-CLASS-260-47UP	c06	N73-32029	US-PATENT-CLASS-264-221	c15	N72-16329
US-PATENT-CLASS-260-65	c06	N73-27980	US-PATENT-CLASS-264-225	c15	N72-16329
US-PATENT-CLASS-260-72.5	c06	N71-11236	US-PATENT-CLASS-264-227	c15	N72-16329
US-PATENT-CLASS-260-72.5	c06	N71-11239	US-PATENT-CLASS-264-257	c37	N74-18126
US-PATENT-CLASS-260-72.5	c06	N71-24740	US-PATENT-CLASS-264-267	c37	N76-29575
US-PATENT-CLASS-260-77.5	c06	N73-30099	US-PATENT-CLASS-264-294	c31	N74-13177
US-PATENT-CLASS-260-77.5	c06	N73-30100	US-PATENT-CLASS-264-304	c37	N76-31524
US-PATENT-CLASS-260-77.5	c06	N73-30103	US-PATENT-CLASS-264-305	c37	N76-31524
US-PATENT-CLASS-260-77.5AP	c06	N72-27144	US-PATENT-CLASS-264-308	c37	N76-31524
US-PATENT-CLASS-260-77.5AP	c06	N73-33076	US-PATENT-CLASS-264-310	c37	N76-31524
US-PATENT-CLASS-260-77.5AP	c27	N77-31308	US-PATENT-CLASS-264-318	c37	N76-31524
US-PATENT-CLASS-260-78	c06	N71-11235	US-PATENT-CLASS-264-331	c27	N76-16230
US-PATENT-CLASS-260-78	c06	N71-11238	US-PATENT-CLASS-264-334	c37	N76-31524
US-PATENT-CLASS-260-78TF	c06	N73-27980	US-PATENT-CLASS-266-19	c15	N70-33382
US-PATENT-CLASS-260-78TF	c27	N74-23125	US-PATENT-CLASS-266-24	c17	N72-28535
US-PATENT-CLASS-260-78TF	c23	N75-30256	US-PATENT-CLASS-267-1	c15	N69-27504
US-PATENT-CLASS-260-78TF	c23	N76-15268	US-PATENT-CLASS-267-1	c15	N70-36225
US-PATENT-CLASS-260-78UA	c06	N73-27980	US-PATENT-CLASS-267-64	c15	N71-21550
US-PATENT-CLASS-260-85.5	c06	N71-23500	US-PATENT-CLASS-267-166	c34	N74-18532
US-PATENT-CLASS-260-92.1	c06	N72-25150	US-PATENT-CLASS-269-21	c37	N76-21554
US-PATENT-CLASS-260-92.1	c06	N72-25152	US-PATENT-CLASS-269-48.1	c39	N74-13131
US-PATENT-CLASS-260-92.1	c27	N76-16228	US-PATENT-CLASS-272-DIG.1	c65	N73-32014
US-PATENT-CLASS-260-92.1	c27	N76-24405	US-PATENT-CLASS-272-DIG.4	c05	N73-32014
US-PATENT-CLASS-260-93.5A	c06	N73-32029	US-PATENT-CLASS-272-DIG.5	c05	N73-32014
US-PATENT-CLASS-260-93.5S	c06	N73-32029	US-PATENT-CLASS-272-1R	c09	N75-15662
US-PATENT-CLASS-260-94.2M	c06	N73-32029	US-PATENT-CLASS-272-57A	c09	N75-15662
US-PATENT-CLASS-260-94.2R	c06	N73-32029	US-PATENT-CLASS-272-70	c05	N71-28619
US-PATENT-CLASS-260-94.7R	c06	N73-32029	US-PATENT-CLASS-272-73	c14	N74-27377
US-PATENT-CLASS-260-94.8	c27	N73-22710	US-PATENT-CLASS-272-73	c05	N73-27941
US-PATENT-CLASS-260-211.5	c06	N72-25149	US-PATENT-CLASS-272-73	c37	N74-18127
US-PATENT-CLASS-260-240G	c27	N76-32315	US-PATENT-CLASS-272-79C	c05	N73-32014
US-PATENT-CLASS-260-346.3	c23	N75-30256	US-PATENT-CLASS-272-80	c37	N74-18127
US-PATENT-CLASS-260-346.3	c23	N76-15268	US-PATENT-CLASS-273-1E	c05	N73-13114
US-PATENT-CLASS-260-348SC	c06	N72-25148	US-PATENT-CLASS-274-4R	c09	N72-11224
US-PATENT-CLASS-260-396N	c27	N74-27037	US-PATENT-CLASS-277-4	c37	N76-22541
US-PATENT-CLASS-260-404.5	c18	N71-15688	US-PATENT-CLASS-277-13	c15	N71-26294
US-PATENT-CLASS-260-429	c06	N71-28808	US-PATENT-CLASS-277-25	c15	N69-21362
US-PATENT-CLASS-260-448.2	c06	N71-23230	US-PATENT-CLASS-277-25	c15	N71-19570
US-PATENT-CLASS-260-448.2D	c06	N72-25151	US-PATENT-CLASS-277-25	c15	N72-29488
US-PATENT-CLASS-260-448.2D	c06	N73-32030	US-PATENT-CLASS-277-25	c37	N74-10474
US-PATENT-CLASS-260-448.2N	c37	N74-21058	US-PATENT-CLASS-277-27	c15	N72-29488
US-PATENT-CLASS-260-485F	c06	N73-30098	US-PATENT-CLASS-277-27	c37	N74-10474
US-PATENT-CLASS-260-520	c23	N75-30256	US-PATENT-CLASS-277-27	c37	N74-15125
US-PATENT-CLASS-260-535H	c06	N72-27144	US-PATENT-CLASS-277-27	c37	N75-21631
US-PATENT-CLASS-260-544P	c06	N72-20121	US-PATENT-CLASS-277-40	c37	N75-21631
US-PATENT-CLASS-260-566B	c27	N76-32315	US-PATENT-CLASS-277-41	c37	N76-22541
US-PATENT-CLASS-260-567.6M	c06	N73-32029	US-PATENT-CLASS-277-74	c15	N72-29488
US-PATENT-CLASS-260-571	c23	N76-15268	US-PATENT-CLASS-277-74	c37	N76-22541
US-PATENT-CLASS-260-615	c06	N71-27254	US-PATENT-CLASS-277-91	c37	N74-15125
US-PATENT-CLASS-260-615	c06	N73-30101	US-PATENT-CLASS-277-93R	c37	N76-22541
US-PATENT-CLASS-260-877	c06	N72-22107	US-PATENT-CLASS-277-96	c37	N74-10474
US-PATENT-CLASS-260-879	c27	N76-16228	US-PATENT-CLASS-277-134	c37	N75-21631
US-PATENT-CLASS-260-900	c27	N76-16228	US-PATENT-CLASS-279-1R	c37	N75-33395
US-PATENT-CLASS-261-145	c28	N72-22772	US-PATENT-CLASS-279-89	c37	N75-33395
US-PATENT-CLASS-261/DIG.75	c34	N77-24423	US-PATENT-CLASS-279-107	c37	N75-33395
US-PATENT-CLASS-261/123	c34	N77-24423	US-PATENT-CLASS-280-150SB	c05	N75-25915
US-PATENT-CLASS-263-48	c15	N69-27483	US-PATENT-CLASS-280-432	c37	N77-14477
US-PATENT-CLASS-264-DIG.36	c18	N73-14584	US-PATENT-CLASS-285-DIG.21	c15	N72-25450
US-PATENT-CLASS-264-DIG.44	c15	N72-16329	US-PATENT-CLASS-285-DIG.21	c33	N73-26958
US-PATENT-CLASS-264-3	c28	N71-26779	US-PATENT-CLASS-285-3	c15	N69-27490
US-PATENT-CLASS-264-3R	c28	N77-10213	US-PATENT-CLASS-285-3	c15	N72-25450
US-PATENT-CLASS-264-3R	c20	N77-17143	US-PATENT-CLASS-285-18	c15	N72-20445
US-PATENT-CLASS-264-22	c15	N72-20446	US-PATENT-CLASS-285-24	c15	N71-10782
US-PATENT-CLASS-264-22	c14	N72-22439	US-PATENT-CLASS-285-27	c15	N70-41808
US-PATENT-CLASS-264-22	c25	N75-12087	US-PATENT-CLASS-285-33	c15	N72-25450
US-PATENT-CLASS-264-27	c26	N71-17818	US-PATENT-CLASS-285-38	c15	N71-24903
US-PATENT-CLASS-264-28	c15	N73-12489	US-PATENT-CLASS-285-45	c15	N71-28937
US-PATENT-CLASS-264-36	c15	N73-12489	US-PATENT-CLASS-285-114	c37	N75-19686
US-PATENT-CLASS-264-36	c32	N74-27612	US-PATENT-CLASS-285-226	c37	N75-19686
US-PATENT-CLASS-264-40	c15	N73-12489	US-PATENT-CLASS-285-226	c37	N76-14460
US-PATENT-CLASS-264-60	c27	N76-22376	US-PATENT-CLASS-285-265	c37	N76-14460
US-PATENT-CLASS-264-63	c27	N76-22376	US-PATENT-CLASS-285-314	c15	N71-24903
US-PATENT-CLASS-264-65	c18	N73-14584	US-PATENT-CLASS-285-316	c15	N72-25450
US-PATENT-CLASS-264-66	c27	N76-22376	US-PATENT-CLASS-285-316	c33	N73-26958
US-PATENT-CLASS-264-92	c15	N71-17803	US-PATENT-CLASS-285-317	c15	N71-24903
US-PATENT-CLASS-264-92	c15	N72-24522	US-PATENT-CLASS-285-331	c15	N70-41629
US-PATENT-CLASS-264-102	c15	N71-10672	US-PATENT-CLASS-285-345	c15	N72-20445
US-PATENT-CLASS-264-102	c15	N73-12489	US-PATENT-CLASS-285-406	c15	N71-24903
US-PATENT-CLASS-264-102	c31	N74-14133	US-PATENT-CLASS-285-410	c05	N72-11085
US-PATENT-CLASS-264-102	c31	N74-18124	US-PATENT-CLASS-287-54A	c11	N72-25287
US-PATENT-CLASS-264-102	c37	N76-24575	US-PATENT-CLASS-287-85R	c15	N73-12488
US-PATENT-CLASS-264-104	c05	N72-25120	US-PATENT-CLASS-287-92	c31	N73-32749
US-PATENT-CLASS-264-111	c17	N71-29137	US-PATENT-CLASS-287-119	c15	N70-41829
US-PATENT-CLASS-264-129	c37	N76-31524	US-PATENT-CLASS-287-189.36	c15	N71-10797
US-PATENT-CLASS-264-135	c37	N74-18126	US-PATENT-CLASS-287-189.365	c15	N71-26312
US-PATENT-CLASS-264-136	c37	N74-18126	US-PATENT-CLASS-290-40	c03	N71-11057
US-PATENT-CLASS-264-161	c37	N76-31524	US-PATENT-CLASS-290-52	c37	N77-32500

NUMBER INDEX

US-PATENT-CLASS-290-52	c37	N77-32501	US-PATENT-CLASS-307-230	c09	N72-21245
US-PATENT-CLASS-292-110	c37	N77-32499	US-PATENT-CLASS-307-230	c09	N73-20232
US-PATENT-CLASS-294-1R	c35	N76-16392	US-PATENT-CLASS-307-230	c33	N74-32712
US-PATENT-CLASS-294-15	c15	N71-29133	US-PATENT-CLASS-307-230	c33	N77-17354
US-PATENT-CLASS-294-19R	c35	N76-16392	US-PATENT-CLASS-307-231	c09	N72-22202
US-PATENT-CLASS-294-83	c15	N71-24897	US-PATENT-CLASS-307-232	c33	N77-21314
US-PATENT-CLASS-294-86.33	c37	N75-33395	US-PATENT-CLASS-307-233	c09	N72-25257
US-PATENT-CLASS-294-116	c37	N75-33395	US-PATENT-CLASS-307-233	c10	N73-26229
US-PATENT-CLASS-297-68	c05	N71-12343	US-PATENT-CLASS-307-233	c33	N77-13315
US-PATENT-CLASS-297-68	c05	N72-11085	US-PATENT-CLASS-307-234	c10	N71-23315
US-PATENT-CLASS-297-216	c05	N70-35152	US-PATENT-CLASS-307-234	c09	N71-27016
US-PATENT-CLASS-297-232	c05	N72-11085	US-PATENT-CLASS-307-234	c08	N71-29138
US-PATENT-CLASS-297-365	c05	N71-12341	US-PATENT-CLASS-307-235	c10	N71-19471
US-PATENT-CLASS-297-385	c05	N75-25915	US-PATENT-CLASS-307-235	c09	N72-23545
US-PATENT-CLASS-297-386	c15	N73-30460	US-PATENT-CLASS-307-235	c10	N71-24862
US-PATENT-CLASS-297-388	c05	N75-25915	US-PATENT-CLASS-307-235R	c33	N75-18479
US-PATENT-CLASS-297-389	c05	N75-25915	US-PATENT-CLASS-307-237	c09	N72-22200
US-PATENT-CLASS-299-67	c46	N74-23068	US-PATENT-CLASS-307-237	c32	N74-19788
US-PATENT-CLASS-299-86	c46	N74-23069	US-PATENT-CLASS-307-238	c33	N75-31331
US-PATENT-CLASS-301-5P	c37	N74-18125	US-PATENT-CLASS-307-238	c33	N77-21314
US-PATENT-CLASS-305-35EB	c11	N73-26238	US-PATENT-CLASS-307-241	c09	N72-22201
US-PATENT-CLASS-305-39	c11	N73-26238	US-PATENT-CLASS-307-242	c10	N73-13235
US-PATENT-CLASS-307-18	c03	N73-31988	US-PATENT-CLASS-307-243	c09	N71-12516
US-PATENT-CLASS-307-18	c33	N74-34638	US-PATENT-CLASS-307-243	c08	N72-22162
US-PATENT-CLASS-307-28	c03	N73-31988	US-PATENT-CLASS-307-243	c33	N74-22814
US-PATENT-CLASS-307-29	c03	N73-31988	US-PATENT-CLASS-307-246	c09	N71-27016
US-PATENT-CLASS-307-35	c33	N74-34638	US-PATENT-CLASS-307-247	c09	N71-29139
US-PATENT-CLASS-307-38	c03	N73-31988	US-PATENT-CLASS-307-247	c09	N72-22202
US-PATENT-CLASS-307-53	c10	N71-26626	US-PATENT-CLASS-307-251	c09	N71-33109
US-PATENT-CLASS-307-64	c33	N77-30365	US-PATENT-CLASS-307-251	c08	N72-22162
US-PATENT-CLASS-307-81	c09	N72-17157	US-PATENT-CLASS-307-252	c10	N69-39888
US-PATENT-CLASS-307-83	c09	N72-25262	US-PATENT-CLASS-307-252	c09	N71-12514
US-PATENT-CLASS-307-88	c08	N70-34743	US-PATENT-CLASS-307-252F	c09	N72-17153
US-PATENT-CLASS-307-88	c09	N70-38604	US-PATENT-CLASS-307-252J	c09	N72-17153
US-PATENT-CLASS-307-88	c09	N71-24803	US-PATENT-CLASS-307-252J	c09	N72-22201
US-PATENT-CLASS-307-88	c09	N71-26000	US-PATENT-CLASS-307-252K	c09	N72-22201
US-PATENT-CLASS-307-88.3	c09	N72-25258	US-PATENT-CLASS-307-252L	c33	N74-27682
US-PATENT-CLASS-307-88.5	c09	N70-34819	US-PATENT-CLASS-307-252N	c09	N72-23171
US-PATENT-CLASS-307-88.5	c09	N70-40272	US-PATENT-CLASS-307-252Q	c33	N74-27682
US-PATENT-CLASS-307-88.5	c09	N70-41675	US-PATENT-CLASS-307-252R	c09	N72-23171
US-PATENT-CLASS-307-88.5	c10	N70-42032	US-PATENT-CLASS-307-253	c10	N71-27126
US-PATENT-CLASS-307-88.5	c09	N71-10673	US-PATENT-CLASS-307-254	c10	N71-24799
US-PATENT-CLASS-307-88.5	c10	N71-15910	US-PATENT-CLASS-307-254	c09	N72-22200
US-PATENT-CLASS-307-88.5	c10	N71-16042	US-PATENT-CLASS-307-255	c33	N76-11410
US-PATENT-CLASS-307-88.5	c10	N71-28739	US-PATENT-CLASS-307-257	c09	N72-21247
US-PATENT-CLASS-307-88NP	c09	N72-22197	US-PATENT-CLASS-307-259	c09	N72-21247
US-PATENT-CLASS-307-92	c09	N72-27227	US-PATENT-CLASS-307-259	c09	N72-23171
US-PATENT-CLASS-307-103	c09	N72-25262	US-PATENT-CLASS-307-259	c10	N73-13235
US-PATENT-CLASS-307-104	c09	N71-24892	US-PATENT-CLASS-307-260	c09	N71-23311
US-PATENT-CLASS-307-106	c09	N69-21468	US-PATENT-CLASS-307-260	c05	N71-23317
US-PATENT-CLASS-307-118	c09	N72-27227	US-PATENT-CLASS-307-260	c33	N75-19515
US-PATENT-CLASS-307-126	c14	N71-27407	US-PATENT-CLASS-307-261	c09	N71-33109
US-PATENT-CLASS-307-127	c33	N74-14956	US-PATENT-CLASS-307-261	c09	N72-25251
US-PATENT-CLASS-307-136	c09	N69-27500	US-PATENT-CLASS-307-262	c10	N72-16172
US-PATENT-CLASS-307-141.8	c03	N72-25020	US-PATENT-CLASS-307-262	c09	N72-22197
US-PATENT-CLASS-307-149	c09	N71-13486	US-PATENT-CLASS-307-262	c09	N72-33204
US-PATENT-CLASS-307-149	c54	N75-12616	US-PATENT-CLASS-307-263	c09	N71-23270
US-PATENT-CLASS-307-157	c16	N73-32391	US-PATENT-CLASS-307-263	c09	N71-28468
US-PATENT-CLASS-307-204	c35	N75-30504	US-PATENT-CLASS-307-265	c09	N69-39987
US-PATENT-CLASS-307-205	c33	N75-14957	US-PATENT-CLASS-307-265	c10	N71-23029
US-PATENT-CLASS-307-206	c10	N72-22236	US-PATENT-CLASS-307-265	c09	N71-28468
US-PATENT-CLASS-307-207	c08	N71-29034	US-PATENT-CLASS-307-265	c10	N71-28860
US-PATENT-CLASS-307-207	c09	N73-13209	US-PATENT-CLASS-307-265	c08	N71-29138
US-PATENT-CLASS-307-208	c33	N75-14957	US-PATENT-CLASS-307-265	c09	N71-29139
US-PATENT-CLASS-307-211	c35	N75-30504	US-PATENT-CLASS-307-267	c09	N71-20447
US-PATENT-CLASS-307-215	c10	N71-28860	US-PATENT-CLASS-307-267	c33	N74-32711
US-PATENT-CLASS-307-215	c09	N71-29139	US-PATENT-CLASS-307-267	c33	N75-18479
US-PATENT-CLASS-307-215	c10	N72-22236	US-PATENT-CLASS-307-268	c09	N69-24317
US-PATENT-CLASS-307-215	c09	N73-13209	US-PATENT-CLASS-307-271	c10	N73-32145
US-PATENT-CLASS-307-216	c33	N74-22814	US-PATENT-CLASS-307-273	c10	N71-18723
US-PATENT-CLASS-307-219	c08	N71-18751	US-PATENT-CLASS-307-273	c09	N71-27016
US-PATENT-CLASS-307-220	c35	N75-30504	US-PATENT-CLASS-307-273	c09	N71-28468
US-PATENT-CLASS-307-221R	c10	N73-26229	US-PATENT-CLASS-307-273	c10	N71-28860
US-PATENT-CLASS-307-221R	c10	N73-20254	US-PATENT-CLASS-307-273	c09	N71-29139
US-PATENT-CLASS-307-222	c33	N76-14373	US-PATENT-CLASS-307-273	c10	N72-20221
US-PATENT-CLASS-307-222	c09	N69-27463	US-PATENT-CLASS-307-280	c33	N77-21314
US-PATENT-CLASS-307-222	c08	N71-29034	US-PATENT-CLASS-307-284	c09	N72-22201
US-PATENT-CLASS-307-223	c09	N72-17157	US-PATENT-CLASS-307-288	c09	N71-23015
US-PATENT-CLASS-307-223B	c09	N72-22201	US-PATENT-CLASS-307-288	c09	N71-28468
US-PATENT-CLASS-307-225R	c33	N74-10223	US-PATENT-CLASS-307-288	c10	N72-20221
US-PATENT-CLASS-307-225R	c33	N75-31330	US-PATENT-CLASS-307-288	c09	N72-22202
US-PATENT-CLASS-307-225R	c33	N77-24375	US-PATENT-CLASS-307-289	c10	N71-19547
US-PATENT-CLASS-307-227	c09	N72-17157	US-PATENT-CLASS-307-290	c33	N74-22814
US-PATENT-CLASS-307-227	c33	N75-19522	US-PATENT-CLASS-307-294	c09	N71-29139
US-PATENT-CLASS-307-229	c09	N71-12520	US-PATENT-CLASS-307-295	c10	N72-17171
US-PATENT-CLASS-307-229	c09	N72-23173	US-PATENT-CLASS-307-295	c10	N72-20223
US-PATENT-CLASS-307-229	c33	N75-18479	US-PATENT-CLASS-307-295	c09	N72-21245
US-PATENT-CLASS-307-229	c33	N77-17354	US-PATENT-CLASS-307-295	c09	N72-33204
US-PATENT-CLASS-307-230	c10	N72-16172	US-PATENT-CLASS-307-295	c33	N74-34638

NUMBER INDEX

US-PATENT-CLASS-307-295	.....	C33	N77-13315	US-PATENT-CLASS-310-4	.....	C09	N71-28421
US-PATENT-CLASS-307-296	.....	C08	N71-12494	US-PATENT-CLASS-310-4	.....	C09	N72-25260
US-PATENT-CLASS-307-296	.....	C07	N71-28430	US-PATENT-CLASS-310-4	.....	C09	N72-27228
US-PATENT-CLASS-307-299	.....	C08	N72-21198	US-PATENT-CLASS-310-4	.....	C20	N75-24837
US-PATENT-CLASS-307-299	.....	C26	N72-21701	US-PATENT-CLASS-310-4	.....	C36	N75-30524
US-PATENT-CLASS-307-300	.....	C10	N71-27126	US-PATENT-CLASS-310-4	.....	C44	N76-16612
US-PATENT-CLASS-307-300	.....	C33	N76-31410	US-PATENT-CLASS-310-4A	.....	C37	N77-19458
US-PATENT-CLASS-307-303	.....	C08	N72-21198	US-PATENT-CLASS-310-4B	.....	C33	N74-27683
US-PATENT-CLASS-307-304	.....	C09	N72-22201	US-PATENT-CLASS-310-4B	.....	C73	N77-18891
US-PATENT-CLASS-307-304	.....	C09	N73-20232	US-PATENT-CLASS-310-5	.....	C03	N70-35408
US-PATENT-CLASS-307-304	.....	C33	N74-34638	US-PATENT-CLASS-310-8.2	.....	C35	N76-15432
US-PATENT-CLASS-307-305	.....	C09	N72-23171	US-PATENT-CLASS-310-8.5	.....	C14	N71-22993
US-PATENT-CLASS-307-308	.....	C14	N73-28488	US-PATENT-CLASS-310-9.1	.....	C15	N71-21311
US-PATENT-CLASS-307-309	.....	C35	N75-13213	US-PATENT-CLASS-310-10	.....	C03	N69-39890
US-PATENT-CLASS-307-310	.....	C09	N73-14214	US-PATENT-CLASS-310-10	.....	C09	N71-23443
US-PATENT-CLASS-307-311	.....	C14	N72-18411	US-PATENT-CLASS-310-10	.....	C09	N71-24904
US-PATENT-CLASS-307-311	.....	C08	N72-21198	US-PATENT-CLASS-310-10	.....	C09	N72-25225
US-PATENT-CLASS-307-311	.....	C09	N73-14214	US-PATENT-CLASS-310-10	.....	C20	N75-24837
US-PATENT-CLASS-307-313	.....	C10	N72-20221	US-PATENT-CLASS-310-11	.....	C25	N69-21929
US-PATENT-CLASS-307-313	.....	C33	N76-31410	US-PATENT-CLASS-310-11	.....	C03	N69-39983
US-PATENT-CLASS-307-315	.....	C33	N76-31410	US-PATENT-CLASS-310-11	.....	C03	N70-36803
US-PATENT-CLASS-307-317	.....	C09	N72-22200	US-PATENT-CLASS-310-11	.....	C14	N72-22439
US-PATENT-CLASS-307-317	.....	C09	N72-22201	US-PATENT-CLASS-310-11	.....	C12	N72-25292
US-PATENT-CLASS-307-321	.....	C33	N75-19520	US-PATENT-CLASS-310-11	.....	C35	N74-21018
US-PATENT-CLASS-307-321	.....	C33	N75-25041	US-PATENT-CLASS-310-11	.....	C36	N75-32441
US-PATENT-CLASS-307-322	.....	C10	N72-22236	US-PATENT-CLASS-310-15	.....	C09	N72-25255
US-PATENT-CLASS-307-323	.....	C10	N72-22236	US-PATENT-CLASS-310-40	.....	C20	N75-24837
US-PATENT-CLASS-308-DTG.1	.....	C15	N72-17451	US-PATENT-CLASS-310-42	.....	C14	N72-22439
US-PATENT-CLASS-308-1	.....	C31	N71-26537	US-PATENT-CLASS-310-51	.....	C15	N71-27169
US-PATENT-CLASS-308-2	.....	C15	N71-23812	US-PATENT-CLASS-310-52	.....	C20	N75-24837
US-PATENT-CLASS-308-2A	.....	C15	N72-26371	US-PATENT-CLASS-310-54	.....	C09	N71-20846
US-PATENT-CLASS-308-2A	.....	C15	N73-12488	US-PATENT-CLASS-310-68	.....	C15	N72-25456
US-PATENT-CLASS-308-5	.....	C15	N71-10617	US-PATENT-CLASS-310-80	.....	C15	N72-25456
US-PATENT-CLASS-308-5	.....	C15	N72-11388	US-PATENT-CLASS-310-83	.....	C15	N72-25456
US-PATENT-CLASS-308-5	.....	C15	N72-17451	US-PATENT-CLASS-310-93	.....	C15	N71-17652
US-PATENT-CLASS-308-5B	.....	C37	N77-28486	US-PATENT-CLASS-310-101	.....	C15	N71-24696
US-PATENT-CLASS-308-9	.....	C15	N70-34664	US-PATENT-CLASS-310-111	.....	C33	N77-26387
US-PATENT-CLASS-308-9	.....	C15	N70-38620	US-PATENT-CLASS-310-168	.....	C09	N71-25999
US-PATENT-CLASS-308-9	.....	C15	N70-39896	US-PATENT-CLASS-310-168	.....	C33	N77-26387
US-PATENT-CLASS-308-9	.....	C15	N71-20739	US-PATENT-CLASS-310-254	.....	C09	N71-25999
US-PATENT-CLASS-308-9	.....	C14	N71-26627	US-PATENT-CLASS-311-37	.....	C35	N75-29380
US-PATENT-CLASS-308-9	.....	C15	N72-17451	US-PATENT-CLASS-312-1	.....	C05	N71-23080
US-PATENT-CLASS-308-9	.....	C15	N73-32359	US-PATENT-CLASS-312-1	.....	C05	N73-20137
US-PATENT-CLASS-308-9	.....	C37	N76-15461	US-PATENT-CLASS-312-1	.....	C37	N74-20063
US-PATENT-CLASS-308-9	.....	C37	N77-28486	US-PATENT-CLASS-312-209	.....	C37	N74-18123
US-PATENT-CLASS-308-10	.....	C15	N71-22997	US-PATENT-CLASS-312-257	.....	C31	N72-22874
US-PATENT-CLASS-308-10	.....	C15	N72-33476	US-PATENT-CLASS-312-296	.....	C09	N71-18600
US-PATENT-CLASS-308-10	.....	C35	N74-18323	US-PATENT-CLASS-313-DTG.8	.....	C28	N73-24783
US-PATENT-CLASS-308-10	.....	C37	N75-18574	US-PATENT-CLASS-313-7	.....	C14	N71-18482
US-PATENT-CLASS-308-10	.....	C37	N76-18459	US-PATENT-CLASS-313-7	.....	C14	N73-32324
US-PATENT-CLASS-308-10	.....	C37	N77-17864	US-PATENT-CLASS-313-11.5	.....	C28	N70-39925
US-PATENT-CLASS-308-35	.....	C15	N73-32359	US-PATENT-CLASS-313-22	.....	C09	N71-26787
US-PATENT-CLASS-308-72	.....	C37	N76-15461	US-PATENT-CLASS-313-32	.....	C33	N74-12913
US-PATENT-CLASS-308-72	.....	C37	N77-32500	US-PATENT-CLASS-313-32	.....	C33	N77-21315
US-PATENT-CLASS-308-73	.....	C37	N74-21061	US-PATENT-CLASS-313-44	.....	C15	N69-24319
US-PATENT-CLASS-308-73	.....	C37	N75-30562	US-PATENT-CLASS-313-60	.....	C33	N77-22386
US-PATENT-CLASS-308-73	.....	C37	N76-15461	US-PATENT-CLASS-313-61S	.....	C73	N74-26767
US-PATENT-CLASS-308-73	.....	C37	N77-28486	US-PATENT-CLASS-313-63	.....	C28	N70-41576
US-PATENT-CLASS-308-121	.....	C37	N74-32921	US-PATENT-CLASS-313-63	.....	C09	N71-10618
US-PATENT-CLASS-308-121	.....	C37	N75-30562	US-PATENT-CLASS-313-63	.....	C28	N71-26781
US-PATENT-CLASS-308-122	.....	C37	N76-15461	US-PATENT-CLASS-313-63	.....	C28	N73-24783
US-PATENT-CLASS-308-160	.....	C37	N76-15461	US-PATENT-CLASS-313-63	.....	C28	N73-24783
US-PATENT-CLASS-308-160	.....	C37	N76-29588	US-PATENT-CLASS-313-63	.....	C75	N75-13625
US-PATENT-CLASS-308-163	.....	C37	N76-29588	US-PATENT-CLASS-313-93	.....	C35	N74-26949
US-PATENT-CLASS-308-170	.....	C15	N71-28465	US-PATENT-CLASS-313-94	.....	C33	N76-31409
US-PATENT-CLASS-308-170	.....	C37	N76-29588	US-PATENT-CLASS-313-104	.....	C14	N73-32317
US-PATENT-CLASS-308-174	.....	C54	N75-12616	US-PATENT-CLASS-313-109.5	.....	C09	N71-33519
US-PATENT-CLASS-308-176	.....	C15	N71-22982	US-PATENT-CLASS-313-110	.....	C09	N71-12521
US-PATENT-CLASS-308-177	.....	C15	N71-29136	US-PATENT-CLASS-313-146	.....	C33	N77-22386
US-PATENT-CLASS-308-187	.....	C15	N71-26189	US-PATENT-CLASS-313-153	.....	C33	N74-12913
US-PATENT-CLASS-308-188	.....	C15	N73-30458	US-PATENT-CLASS-313-156	.....	C25	N70-34661
US-PATENT-CLASS-308-188	.....	C37	N74-21064	US-PATENT-CLASS-313-161	.....	C25	N73-25760
US-PATENT-CLASS-308-191	.....	C37	N74-21064	US-PATENT-CLASS-313-161	.....	C09	N73-30181
US-PATENT-CLASS-308-191	.....	C37	N75-31446	US-PATENT-CLASS-313-161	.....	C33	N77-21315
US-PATENT-CLASS-308-193	.....	C15	N73-30458	US-PATENT-CLASS-313-175	.....	C33	N77-21316
US-PATENT-CLASS-308-195	.....	C15	N72-22490	US-PATENT-CLASS-313-180	.....	C33	N77-21316
US-PATENT-CLASS-308-195	.....	C37	N75-31446	US-PATENT-CLASS-313-182	.....	C33	N77-22386
US-PATENT-CLASS-308-195	.....	C37	N77-32500	US-PATENT-CLASS-313-184	.....	C33	N77-21315
US-PATENT-CLASS-308-195	.....	C37	N77-32501	US-PATENT-CLASS-313-184	.....	C33	N77-21316
US-PATENT-CLASS-308-201	.....	C37	N75-31446	US-PATENT-CLASS-313-186	.....	C25	N72-24753
US-PATENT-CLASS-310-2	.....	C03	N72-23048	US-PATENT-CLASS-313-204	.....	C28	N73-24783
US-PATENT-CLASS-310-4	.....	C09	N69-21313	US-PATENT-CLASS-313-209	.....	C33	N74-12913
US-PATENT-CLASS-310-4	.....	C03	N69-39898	US-PATENT-CLASS-313-212	.....	C25	N72-24753
US-PATENT-CLASS-310-4	.....	C09	N69-39929	US-PATENT-CLASS-313-217	.....	C28	N73-27699
US-PATENT-CLASS-310-4	.....	C03	N70-34134	US-PATENT-CLASS-313-217	.....	C33	N74-12913
US-PATENT-CLASS-310-4	.....	C03	N71-11055	US-PATENT-CLASS-313-218	.....	C28	N73-27699
US-PATENT-CLASS-310-4	.....	C22	N71-23599	US-PATENT-CLASS-313-224	.....	C25	N72-24753
US-PATENT-CLASS-310-4	.....	C09	N71-24807	US-PATENT-CLASS-313-224	.....	C33	N74-12913
US-PATENT-CLASS-310-4	.....	C33	N71-27862	US-PATENT-CLASS-313-224	.....	C33	N77-21315
				US-PATENT-CLASS-313-230	.....	C28	N71-28850

NUMBER INDEX

US-PATENT-CLASS-313-230	c28	N73-27699	US-PATENT-CLASS-315-311	c14	N72-27411
US-PATENT-CLASS-313-230	c20	N77-20162	US-PATENT-CLASS-315-324	c09	N73-30181
US-PATENT-CLASS-313-231	c06	N69-39889	US-PATENT-CLASS-315-326	c25	N72-24753
US-PATENT-CLASS-313-231	c09	N71-23190	US-PATENT-CLASS-315-344	c33	N77-21315
US-PATENT-CLASS-313-231	c09	N71-33519	US-PATENT-CLASS-315-349	c09	N72-25250
US-PATENT-CLASS-313-231	c25	N72-24753	US-PATENT-CLASS-315-356	c16	N73-32391
US-PATENT-CLASS-313-231	c25	N72-32688	US-PATENT-CLASS-315-358	c25	N72-24753
US-PATENT-CLASS-313-231	c28	N73-24783	US-PATENT-CLASS-315-367	c33	N75-26244
US-PATENT-CLASS-313-231	c25	N73-25760	US-PATENT-CLASS-315-369	c33	N75-26244
US-PATENT-CLASS-313-231.3	c20	N77-20162	US-PATENT-CLASS-315-387	c33	N75-26244
US-PATENT-CLASS-313-231.4	c20	N77-10148	US-PATENT-CLASS-317-DIG.3	c10	N71-26334
US-PATENT-CLASS-313-236	c09	N71-26182	US-PATENT-CLASS-317-DIG.6	c10	N73-26228
US-PATENT-CLASS-313-237	c09	N71-26182	US-PATENT-CLASS-317-2D	c33	N77-10429
US-PATENT-CLASS-313-240	c20	N77-10148	US-PATENT-CLASS-317-9	c09	N71-22796
US-PATENT-CLASS-313-250	c31	N76-31365	US-PATENT-CLASS-317-9	c09	N71-27001
US-PATENT-CLASS-313-271	c25	N71-20747	US-PATENT-CLASS-317-16	c09	N69-39897
US-PATENT-CLASS-313-306	c31	N76-31365	US-PATENT-CLASS-317-16	c33	N74-17929
US-PATENT-CLASS-313-309	c10	N72-27246	US-PATENT-CLASS-317-20	c10	N71-26531
US-PATENT-CLASS-313-309	c31	N76-31365	US-PATENT-CLASS-317-31	c09	N71-12526
US-PATENT-CLASS-313-311	c73	N77-18891	US-PATENT-CLASS-317-31	c10	N71-23543
US-PATENT-CLASS-313-336	c10	N72-27246	US-PATENT-CLASS-317-31	c33	N74-17929
US-PATENT-CLASS-313-338	c31	N76-31365	US-PATENT-CLASS-317-31	c33	N77-14333
US-PATENT-CLASS-313-351	c10	N72-27246	US-PATENT-CLASS-317-33	c10	N71-26541
US-PATENT-CLASS-313-352	c09	N71-22987	US-PATENT-CLASS-317-33	c09	N71-27001
US-PATENT-CLASS-313-355	c28	N73-27699	US-PATENT-CLASS-317-33	c10	N71-27366
US-PATENT-CLASS-313-356	c14	N72-29464	US-PATENT-CLASS-317-33	c09	N71-29008
US-PATENT-CLASS-313-360	c20	N77-20162	US-PATENT-CLASS-317-33SC	c33	N74-14956
US-PATENT-CLASS-313-361	c20	N77-10148	US-PATENT-CLASS-317-43	c33	N74-14956
US-PATENT-CLASS-314-129	c15	N69-24266	US-PATENT-CLASS-317-46	c33	N74-14956
US-PATENT-CLASS-315-DIG.2	c16	N73-32391	US-PATENT-CLASS-317-47	c33	N74-14956
US-PATENT-CLASS-315-3.5	c09	N73-13208	US-PATENT-CLASS-317-48	c33	N74-14956
US-PATENT-CLASS-315-5.35	c33	N74-10195	US-PATENT-CLASS-317-54	c09	N71-29008
US-PATENT-CLASS-315-5.38	c09	N73-13208	US-PATENT-CLASS-317-60	c09	N71-29008
US-PATENT-CLASS-315-5.38	c33	N74-10195	US-PATENT-CLASS-317-100	c10	N71-28783
US-PATENT-CLASS-315-10	c33	N74-21850	US-PATENT-CLASS-317-100	c10	N73-25243
US-PATENT-CLASS-315-10	c33	N75-26244	US-PATENT-CLASS-317-101	c09	N71-26143
US-PATENT-CLASS-315-11	c33	N74-21850	US-PATENT-CLASS-317-101A	c09	N72-33205
US-PATENT-CLASS-315-12	c33	N74-21850	US-PATENT-CLASS-317-101A	c23	N73-13660
US-PATENT-CLASS-315-18	c32	N74-20813	US-PATENT-CLASS-317-101DR	c15	N72-22486
US-PATENT-CLASS-315-18	c33	N75-19517	US-PATENT-CLASS-317-101DR	c10	N73-25243
US-PATENT-CLASS-315-22	c10	N72-20225	US-PATENT-CLASS-317-117	c15	N72-22486
US-PATENT-CLASS-315-22	c32	N74-20813	US-PATENT-CLASS-317-120	c15	N72-22486
US-PATENT-CLASS-315-22B	c10	N72-31273	US-PATENT-CLASS-317-122	c15	N71-18701
US-PATENT-CLASS-315-24	c08	N71-20571	US-PATENT-CLASS-317-123	c09	N71-24892
US-PATENT-CLASS-315-25	c10	N72-20225	US-PATENT-CLASS-317-140	c09	N70-34502
US-PATENT-CLASS-315-26	c09	N71-23189	US-PATENT-CLASS-317-148.5	c10	N71-23271
US-PATENT-CLASS-315-30	c33	N75-27250	US-PATENT-CLASS-317-148.5	c09	N71-24892
US-PATENT-CLASS-315-30R	c10	N72-31273	US-PATENT-CLASS-317-153	c10	N71-26334
US-PATENT-CLASS-315-36	c10	N72-27246	US-PATENT-CLASS-317-155.5	c09	N71-29008
US-PATENT-CLASS-315-101	c16	N73-32391	US-PATENT-CLASS-317-157.5	c15	N69-21672
US-PATENT-CLASS-315-108	c09	N71-33519	US-PATENT-CLASS-317-158	c15	N73-28516
US-PATENT-CLASS-315-108	c33	N77-21316	US-PATENT-CLASS-317-158	c26	N73-28710
US-PATENT-CLASS-315-110	c33	N77-21316	US-PATENT-CLASS-317-158	c15	N73-32361
US-PATENT-CLASS-315-111	c25	N70-33267	US-PATENT-CLASS-317-230	c09	N71-27232
US-PATENT-CLASS-315-111	c25	N70-41628	US-PATENT-CLASS-317-230	c26	N72-28761
US-PATENT-CLASS-315-111	c25	N71-15562	US-PATENT-CLASS-317-231	c09	N71-27232
US-PATENT-CLASS-315-111	c24	N71-16213	US-PATENT-CLASS-317-234	c14	N69-23191
US-PATENT-CLASS-315-111	c25	N71-21693	US-PATENT-CLASS-317-234	c09	N69-27422
US-PATENT-CLASS-315-111	c28	N71-26781	US-PATENT-CLASS-317-234	c26	N71-18064
US-PATENT-CLASS-315-111	c25	N71-29184	US-PATENT-CLASS-317-234A	c15	N73-14469
US-PATENT-CLASS-315-111	c09	N71-33519	US-PATENT-CLASS-317-234D	c14	N72-31446
US-PATENT-CLASS-315-111	c25	N72-24753	US-PATENT-CLASS-317-234E	c33	N74-12951
US-PATENT-CLASS-315-111	c25	N72-32688	US-PATENT-CLASS-317-234F	c33	N74-12951
US-PATENT-CLASS-315-111	c14	N73-30391	US-PATENT-CLASS-317-234G	c14	N72-31446
US-PATENT-CLASS-315-111	c75	N75-13625	US-PATENT-CLASS-317-234G	c15	N73-14469
US-PATENT-CLASS-315-111	c33	N75-29318	US-PATENT-CLASS-317-234G	c09	N73-27150
US-PATENT-CLASS-315-111	c37	N75-29426	US-PATENT-CLASS-317-234J	c26	N72-25679
US-PATENT-CLASS-315-111.3	c20	N77-10148	US-PATENT-CLASS-317-234L	c09	N73-27150
US-PATENT-CLASS-315-111.3	c20	N77-20162	US-PATENT-CLASS-317-234M	c09	N73-27150
US-PATENT-CLASS-315-111.6	c75	N76-14931	US-PATENT-CLASS-317-234N	c33	N74-12951
US-PATENT-CLASS-315-135	c20	N77-20162	US-PATENT-CLASS-317-234N	c09	N73-27150
US-PATENT-CLASS-315-151	c09	N72-25250	US-PATENT-CLASS-317-234N	c33	N74-12951
US-PATENT-CLASS-315-151	c14	N72-27411	US-PATENT-CLASS-317-234R	c09	N73-27150
US-PATENT-CLASS-315-153	c14	N73-16483	US-PATENT-CLASS-317-234R	c33	N74-12951
US-PATENT-CLASS-315-156	c14	N72-27411	US-PATENT-CLASS-317-234V	c26	N72-21701
US-PATENT-CLASS-315-158	c14	N72-27411	US-PATENT-CLASS-317-234V	c09	N73-15235
US-PATENT-CLASS-315-160	c09	N71-12540	US-PATENT-CLASS-317-235	c09	N69-24318
US-PATENT-CLASS-315-169R	c23	N73-13660	US-PATENT-CLASS-317-235	c09	N72-33205
US-PATENT-CLASS-315-169R	c36	N75-19652	US-PATENT-CLASS-317-235A	c26	N72-25679
US-PATENT-CLASS-315-169TV	c23	N73-13660	US-PATENT-CLASS-317-235A	c09	N72-33205
US-PATENT-CLASS-315-176	c33	N77-28385	US-PATENT-CLASS-317-235AG	c09	N73-15235
US-PATENT-CLASS-315-211	c33	N74-20859	US-PATENT-CLASS-317-235AJ	c26	N72-25679
US-PATENT-CLASS-315-228	c33	N74-20859	US-PATENT-CLASS-317-235AJ	c09	N72-33205
US-PATENT-CLASS-315-241	c09	N71-13518	US-PATENT-CLASS-317-235AM	c09	N73-19235
US-PATENT-CLASS-315-248	c09	N73-30181	US-PATENT-CLASS-317-235H	c35	N75-13213
US-PATENT-CLASS-315-258	c16	N73-32391	US-PATENT-CLASS-317-235K	c09	N73-15235
US-PATENT-CLASS-315-297	c14	N72-27411	US-PATENT-CLASS-317-235M	c14	N72-31446
US-PATENT-CLASS-315-307	c14	N72-27411	US-PATENT-CLASS-317-235N	c09	N73-19235
US-PATENT-CLASS-315-310	c14	N72-27411	US-PATENT-CLASS-317-235N	c35	N74-15090

NUMBER INDEX

US-PATENT-CLASS-317-235R	c26	N72-21701	US-PATENT-CLASS-321-2	c03	N69-25146
US-PATENT-CLASS-317-235R	c26	N72-25679	US-PATENT-CLASS-321-2	c03	N71-12255
US-PATENT-CLASS-317-235R	c14	N72-31446	US-PATENT-CLASS-321-2	c09	N71-23188
US-PATENT-CLASS-317-235R	c09	N73-19235	US-PATENT-CLASS-321-2	c03	N71-23239
US-PATENT-CLASS-317-235R	c09	N73-32112	US-PATENT-CLASS-321-2	c10	N71-26085
US-PATENT-CLASS-317-235T	c09	N73-19235	US-PATENT-CLASS-321-2	c09	N72-22196
US-PATENT-CLASS-317-235UA	c09	N73-19235	US-PATENT-CLASS-321-2	c09	N72-22203
US-PATENT-CLASS-317-235WW	c09	N73-32112	US-PATENT-CLASS-321-2	c03	N72-23048
US-PATENT-CLASS-317-238	c09	N71-27232	US-PATENT-CLASS-321-2	c09	N72-25249
US-PATENT-CLASS-317-246	c14	N69-21541	US-PATENT-CLASS-321-2	c09	N72-25251
US-PATENT-CLASS-317-246	c33	N76-21390	US-PATENT-CLASS-321-2	c09	N72-25252
US-PATENT-CLASS-317-246	c35	N76-22509	US-PATENT-CLASS-321-2	c09	N72-25253
US-PATENT-CLASS-317-247	c14	N72-24477	US-PATENT-CLASS-321-2	c09	N72-25254
US-PATENT-CLASS-317-258	c09	N71-13522	US-PATENT-CLASS-321-2	c33	N74-11049
US-PATENT-CLASS-317-258	c33	N76-15373	US-PATENT-CLASS-321-2	c33	N77-10428
US-PATENT-CLASS-317-261	c26	N72-28761	US-PATENT-CLASS-321-5	c08	N71-18752
US-PATENT-CLASS-317-261	c33	N76-15373	US-PATENT-CLASS-321-8R	c35	N74-18090
US-PATENT-CLASS-318-20.105	c08	N71-27057	US-PATENT-CLASS-321-9	c10	N71-25139
US-PATENT-CLASS-318-22	c15	N71-17694	US-PATENT-CLASS-321-10	c09	N72-17154
US-PATENT-CLASS-318-31	c15	N71-28952	US-PATENT-CLASS-321-11	c09	N69-39984
US-PATENT-CLASS-318-137	c33	N75-19524	US-PATENT-CLASS-321-11	c09	N72-25252
US-PATENT-CLASS-318-138	c09	N71-10677	US-PATENT-CLASS-321-11	c10	N73-26228
US-PATENT-CLASS-318-138	c14	N71-17585	US-PATENT-CLASS-321-12	c10	N71-27366
US-PATENT-CLASS-318-138	c10	N71-18772	US-PATENT-CLASS-321-13	c33	N77-14333
US-PATENT-CLASS-318-138	c09	N71-25999	US-PATENT-CLASS-321-14	c09	N72-22196
US-PATENT-CLASS-318-138	c33	N77-26386	US-PATENT-CLASS-321-15	c09	N72-22203
US-PATENT-CLASS-318-167	c33	N75-19524	US-PATENT-CLASS-321-15	c33	N75-19522
US-PATENT-CLASS-318-176	c33	N75-19524	US-PATENT-CLASS-321-18	c09	N72-22203
US-PATENT-CLASS-318-183	c33	N75-19524	US-PATENT-CLASS-321-18	c09	N72-25251
US-PATENT-CLASS-318-227	c07	N71-33613	US-PATENT-CLASS-321-18	c09	N72-25252
US-PATENT-CLASS-318-227	c33	N75-15874	US-PATENT-CLASS-321-18	c33	N74-11049
US-PATENT-CLASS-318-227	c33	N77-26386	US-PATENT-CLASS-321-19	c09	N72-22196
US-PATENT-CLASS-318-230	c07	N71-33613	US-PATENT-CLASS-321-19	c09	N72-25252
US-PATENT-CLASS-318-230	c10	N73-32145	US-PATENT-CLASS-321-19	c33	N77-10428
US-PATENT-CLASS-318-230	c33	N75-15874	US-PATENT-CLASS-321-25	c09	N72-22196
US-PATENT-CLASS-318-231	c10	N73-32145	US-PATENT-CLASS-321-45	c09	N71-24800
US-PATENT-CLASS-318-231	c33	N75-15874	US-PATENT-CLASS-321-45	c09	N72-22203
US-PATENT-CLASS-318-254	c09	N71-25999	US-PATENT-CLASS-321-45C	c10	N73-26228
US-PATENT-CLASS-318-254	c09	N73-32107	US-PATENT-CLASS-321-45ER	c09	N72-25252
US-PATENT-CLASS-318-254	c33	N77-26386	US-PATENT-CLASS-321-45R	c09	N72-25252
US-PATENT-CLASS-318-257	c10	N71-18724	US-PATENT-CLASS-321-45R	c09	N72-25254
US-PATENT-CLASS-318-258	c09	N71-26092	US-PATENT-CLASS-321-45R	c33	N74-22864
US-PATENT-CLASS-318-260	c09	N70-38712	US-PATENT-CLASS-321-45S	c33	N74-11049
US-PATENT-CLASS-318-265	c15	N71-24895	US-PATENT-CLASS-321-47	c09	N71-33109
US-PATENT-CLASS-318-267	c37	N77-27400	US-PATENT-CLASS-321-47	c09	N72-25253
US-PATENT-CLASS-318-308	c11	N72-20244	US-PATENT-CLASS-321-48	c12	N71-20896
US-PATENT-CLASS-318-314	c10	N71-20448	US-PATENT-CLASS-321-60	c14	N71-23174
US-PATENT-CLASS-318-314	c09	N75-24758	US-PATENT-CLASS-321-61	c09	N71-27364
US-PATENT-CLASS-318-317	c09	N71-28886	US-PATENT-CLASS-321-64	c09	N71-27364
US-PATENT-CLASS-318-318	c09	N71-24805	US-PATENT-CLASS-321-69	c10	N71-26414
US-PATENT-CLASS-318-318	c09	N75-24758	US-PATENT-CLASS-322-2	c03	N72-23048
US-PATENT-CLASS-318-327	c11	N72-20244	US-PATENT-CLASS-322-32	c09	N71-27364
US-PATENT-CLASS-318-328	c09	N73-32107	US-PATENT-CLASS-322-96	c33	N77-26387
US-PATENT-CLASS-318-331	c09	N71-28886	US-PATENT-CLASS-323-DIG.1	c09	N72-21243
US-PATENT-CLASS-318-341	c10	N73-32145	US-PATENT-CLASS-323-DIG.1	c09	N72-25249
US-PATENT-CLASS-318-341	c09	N75-24758	US-PATENT-CLASS-323-DIG.1	c33	N74-11049
US-PATENT-CLASS-318-345	c09	N71-28886	US-PATENT-CLASS-323-DIG.1	c33	N77-10428
US-PATENT-CLASS-318-376	c10	N71-16030	US-PATENT-CLASS-323-8	c10	N71-10578
US-PATENT-CLASS-318-376	c11	N72-20244	US-PATENT-CLASS-323-17	c09	N72-25249
US-PATENT-CLASS-318-382	c15	N71-24695	US-PATENT-CLASS-323-17	c33	N77-10428
US-PATENT-CLASS-318-468	c37	N77-27400	US-PATENT-CLASS-323-19	c08	N72-31226
US-PATENT-CLASS-318-470	c37	N77-27400	US-PATENT-CLASS-323-20	c14	N71-27407
US-PATENT-CLASS-318-489	c02	N73-19004	US-PATENT-CLASS-323-22	c09	N71-21449
US-PATENT-CLASS-318-504	c09	N71-28886	US-PATENT-CLASS-323-22	c09	N71-23316
US-PATENT-CLASS-318-571	c10	N71-27136	US-PATENT-CLASS-323-22T	c09	N72-21243
US-PATENT-CLASS-318-576	c09	N72-21246	US-PATENT-CLASS-323-22T	c09	N72-25249
US-PATENT-CLASS-318-580	c08	N74-10942	US-PATENT-CLASS-323-22T	c33	N77-10428
US-PATENT-CLASS-318-599	c10	N71-24861	US-PATENT-CLASS-323-23	c33	N77-10428
US-PATENT-CLASS-318-602	c33	N74-29556	US-PATENT-CLASS-323-38	c09	N72-21243
US-PATENT-CLASS-318-603	c33	N74-29556	US-PATENT-CLASS-323-48	c09	N71-27053
US-PATENT-CLASS-318-608	c33	N75-13139	US-PATENT-CLASS-323-48	c09	N72-25262
US-PATENT-CLASS-318-628	c08	N74-10942	US-PATENT-CLASS-323-56	c10	N71-22961
US-PATENT-CLASS-318-640	c33	N75-13139	US-PATENT-CLASS-323-56	c09	N71-24893
US-PATENT-CLASS-318-640	c54	N75-27758	US-PATENT-CLASS-323-56	c09	N72-22196
US-PATENT-CLASS-318-649	c33	N75-13139	US-PATENT-CLASS-323-60	c09	N71-27053
US-PATENT-CLASS-318-653	c10	N71-27136	US-PATENT-CLASS-323-82	c09	N72-25262
US-PATENT-CLASS-318-664	c33	N74-29556	US-PATENT-CLASS-323-89C	c09	N72-22196
US-PATENT-CLASS-318-675	c33	N75-13139	US-PATENT-CLASS-323-93	c33	N77-31804
US-PATENT-CLASS-318-675	c37	N77-27400	US-PATENT-CLASS-323-106	c33	N74-22885
US-PATENT-CLASS-320-2	c44	N77-14581	US-PATENT-CLASS-323-122	c33	N74-22885
US-PATENT-CLASS-320-13	c03	N71-29129	US-PATENT-CLASS-323-128	c33	N74-22885
US-PATENT-CLASS-320-17	c03	N71-24605	US-PATENT-CLASS-324-5	c14	N71-20428
US-PATENT-CLASS-320-21	c44	N76-18643	US-PATENT-CLASS-324-5R	c16	N73-13489
US-PATENT-CLASS-320-22	c44	N76-18643	US-PATENT-CLASS-324-DIG.1	c33	N75-19520
US-PATENT-CLASS-320-23	c03	N71-19438	US-PATENT-CLASS-324-DIG.1	c33	N75-25041
US-PATENT-CLASS-320-39	c03	N71-24719	US-PATENT-CLASS-324-0.5	c14	N71-26137
US-PATENT-CLASS-320-48	c03	N72-25020	US-PATENT-CLASS-324-0.5	c14	N71-26266
US-PATENT-CLASS-321-1.5	c09	N73-32109	US-PATENT-CLASS-324-5	c14	N71-28991
US-PATENT-CLASS-321-2	c03	N69-21330	US-PATENT-CLASS-324-20R	c09	N72-23172

NUMBER INDEX

US-PATENT-CLASS-324-29.5	c03	N72-25020	US-PATENT-CLASS-324-83A	c10	N72-20224
US-PATENT-CLASS-324-29.5	c14	N73-30388	US-PATENT-CLASS-324-83C	c35	N74-21017
US-PATENT-CLASS-324-29.5	c44	N74-27519	US-PATENT-CLASS-324-83Q	c33	N75-26243
US-PATENT-CLASS-324-30B	c33	N76-19339	US-PATENT-CLASS-324-85	c10	N72-20224
US-PATENT-CLASS-324-30B	c14	N73-20478	US-PATENT-CLASS-324-92	c26	N72-25680
US-PATENT-CLASS-324-32	c14	N71-16014	US-PATENT-CLASS-324-95	c10	N71-12554
US-PATENT-CLASS-324-32	c33	N75-18477	US-PATENT-CLASS-324-95	c14	N73-30388
US-PATENT-CLASS-324-32	c33	N75-19522	US-PATENT-CLASS-324-96	c26	N72-25680
US-PATENT-CLASS-324-33	c25	N69-39884	US-PATENT-CLASS-324-102	c09	N72-11225
US-PATENT-CLASS-324-33	c14	N70-35666	US-PATENT-CLASS-324-102	c33	N74-17930
US-PATENT-CLASS-324-33	c24	N71-20518	US-PATENT-CLASS-324-102	c33	N75-19521
US-PATENT-CLASS-324-33	c14	N71-21090	US-PATENT-CLASS-324-103	c10	N71-27338
US-PATENT-CLASS-324-33	c14	N71-27090	US-PATENT-CLASS-324-106	c14	N70-38602
US-PATENT-CLASS-324-34	c25	N71-16073	US-PATENT-CLASS-324-106	c08	N71-29138
US-PATENT-CLASS-324-34PL	c35	N74-21018	US-PATENT-CLASS-324-107	c10	N71-27338
US-PATENT-CLASS-324-34R	c26	N76-18257	US-PATENT-CLASS-324-113	c09	N70-41655
US-PATENT-CLASS-324-40	c38	N74-15395	US-PATENT-CLASS-324-113	c33	N75-19521
US-PATENT-CLASS-324-41	c10	N72-28240	US-PATENT-CLASS-324-115	c14	N71-26244
US-PATENT-CLASS-324-43	c14	N69-27423	US-PATENT-CLASS-324-115	c10	N72-20222
US-PATENT-CLASS-324-43	c09	N70-40123	US-PATENT-CLASS-324-117	c14	N71-23037
US-PATENT-CLASS-324-43	c14	N71-15962	US-PATENT-CLASS-324-118	c33	N74-17930
US-PATENT-CLASS-324-43	c14	N71-26135	US-PATENT-CLASS-324-119	c09	N72-11225
US-PATENT-CLASS-324-43	c14	N71-27325	US-PATENT-CLASS-324-120	c14	N71-19431
US-PATENT-CLASS-324-43R	c35	N76-16390	US-PATENT-CLASS-324-120	c09	N71-23021
US-PATENT-CLASS-324-52	c14	N72-17325	US-PATENT-CLASS-324-123R	c09	N72-11225
US-PATENT-CLASS-324-52	c14	N73-28486	US-PATENT-CLASS-324-132	c09	N71-13530
US-PATENT-CLASS-324-50	c33	N75-18477	US-PATENT-CLASS-324-132	c10	N72-20222
US-PATENT-CLASS-324-57	c10	N71-16057	US-PATENT-CLASS-324-133	c10	N71-27338
US-PATENT-CLASS-324-57	c09	N71-20569	US-PATENT-CLASS-324-158	c09	N69-21926
US-PATENT-CLASS-324-57H	c35	N77-32455	US-PATENT-CLASS-324-158D	c15	N72-25457
US-PATENT-CLASS-324-57PS	c35	N75-21582	US-PATENT-CLASS-324-158D	c76	N76-20994
US-PATENT-CLASS-324-57R	c15	N72-21464	US-PATENT-CLASS-324-158R	c76	N76-20994
US-PATENT-CLASS-324-57R	c14	N73-30388	US-PATENT-CLASS-324-158T	c15	N72-25457
US-PATENT-CLASS-324-57R	c35	N74-18090	US-PATENT-CLASS-324-158T	c35	N75-12270
US-PATENT-CLASS-324-58.5	c15	N71-17822	US-PATENT-CLASS-324-158T	c76	N76-20994
US-PATENT-CLASS-324-58.5	c25	N71-20563	US-PATENT-CLASS-324-163	c35	N77-30436
US-PATENT-CLASS-324-58.5	c14	N71-26137	US-PATENT-CLASS-324-165	c35	N77-30436
US-PATENT-CLASS-324-58.5	c18	N71-27397	US-PATENT-CLASS-324-174	c35	N77-30436
US-PATENT-CLASS-324-58.5A	c33	N75-26245	US-PATENT-CLASS-324-181	c09	N71-24717
US-PATENT-CLASS-324-58.5C	c33	N75-26245	US-PATENT-CLASS-324-186	c09	N72-25257
US-PATENT-CLASS-324-59	c35	N77-32455	US-PATENT-CLASS-324-186	c52	N74-12778
US-PATENT-CLASS-324-60	c33	N77-31404	US-PATENT-CLASS-325-4	c07	N71-16088
US-PATENT-CLASS-324-60C	c35	N75-12270	US-PATENT-CLASS-325-4	c07	N71-19773
US-PATENT-CLASS-324-60C	c76	N76-20994	US-PATENT-CLASS-325-4	c07	N71-24621
US-PATENT-CLASS-324-61	c14	N69-39785	US-PATENT-CLASS-325-4	c07	N72-11149
US-PATENT-CLASS-324-61	c14	N70-36618	US-PATENT-CLASS-325-4	c07	N72-12080
US-PATENT-CLASS-324-61	c14	N71-10797	US-PATENT-CLASS-325-4	c07	N72-20140
US-PATENT-CLASS-324-61	c14	N71-27397	US-PATENT-CLASS-325-4	c07	N72-25171
US-PATENT-CLASS-324-61	c14	N72-22442	US-PATENT-CLASS-325-4	c07	N73-20174
US-PATENT-CLASS-324-61R	c14	N72-28477	US-PATENT-CLASS-325-4	c15	N75-13007
US-PATENT-CLASS-324-61R	c35	N76-22509	US-PATENT-CLASS-325-4	c32	N75-26195
US-PATENT-CLASS-324-62R	c14	N73-30388	US-PATENT-CLASS-325-4	c32	N77-20289
US-PATENT-CLASS-324-64	c15	N72-21464	US-PATENT-CLASS-325-5	c07	N73-20174
US-PATENT-CLASS-324-65	c14	N71-27186	US-PATENT-CLASS-325-7	c07	N73-20174
US-PATENT-CLASS-324-65P	c14	N73-20478	US-PATENT-CLASS-325-8	c07	N73-20174
US-PATENT-CLASS-324-65R	c15	N72-23497	US-PATENT-CLASS-325-9	c07	N73-20174
US-PATENT-CLASS-324-66	c05	N72-16015	US-PATENT-CLASS-325-10	c07	N72-12081
US-PATENT-CLASS-324-70	c14	N70-41332	US-PATENT-CLASS-325-12	c07	N73-20174
US-PATENT-CLASS-324-70	c14	N71-22990	US-PATENT-CLASS-325-13	c07	N72-12081
US-PATENT-CLASS-324-70	c10	N71-24863	US-PATENT-CLASS-325-14	c17	N76-21250
US-PATENT-CLASS-324-71	c09	N71-24843	US-PATENT-CLASS-325-16	c07	N71-27056
US-PATENT-CLASS-324-71CP	c35	N76-22509	US-PATENT-CLASS-325-17	c07	N73-20174
US-PATENT-CLASS-324-71R	c09	N72-21246	US-PATENT-CLASS-325-23	c07	N71-27056
US-PATENT-CLASS-324-71R	c15	N72-21464	US-PATENT-CLASS-325-29	c09	N72-22202
US-PATENT-CLASS-324-72	c25	N71-15650	US-PATENT-CLASS-325-30	c32	N74-26654
US-PATENT-CLASS-324-72	c10	N71-19421	US-PATENT-CLASS-325-30	c32	N75-24981
US-PATENT-CLASS-324-72	c14	N71-23699	US-PATENT-CLASS-325-30	c32	N77-30308
US-PATENT-CLASS-324-72	c07	N73-20175	US-PATENT-CLASS-325-31	c07	N71-20791
US-PATENT-CLASS-324-72	c14	N73-32318	US-PATENT-CLASS-325-38	c07	N72-20140
US-PATENT-CLASS-324-72	c33	N74-27862	US-PATENT-CLASS-325-38	c07	N72-25173
US-PATENT-CLASS-324-72	c33	N75-26246	US-PATENT-CLASS-325-38B	c35	N74-17885
US-PATENT-CLASS-324-72	c33	N77-10429	US-PATENT-CLASS-325-39	c07	N72-11149
US-PATENT-CLASS-324-72.5	c44	N74-27519	US-PATENT-CLASS-325-40	c07	N73-26118
US-PATENT-CLASS-324-73	c14	N71-28991	US-PATENT-CLASS-325-41	c10	N71-26577
US-PATENT-CLASS-324-73AT	c08	N72-22166	US-PATENT-CLASS-325-41	c32	N77-12240
US-PATENT-CLASS-324-77	c09	N71-10659	US-PATENT-CLASS-325-42	c07	N71-11266
US-PATENT-CLASS-324-77	c07	N71-24622	US-PATENT-CLASS-325-42	c32	N76-21366
US-PATENT-CLASS-324-77B	c60	N75-13539	US-PATENT-CLASS-325-42	c32	N77-30308
US-PATENT-CLASS-324-77G	c08	N72-20177	US-PATENT-CLASS-325-45	c07	N73-25160
US-PATENT-CLASS-324-77H	c35	N75-21582	US-PATENT-CLASS-325-51	c07	N72-25173
US-PATENT-CLASS-324-77R	c10	N73-25240	US-PATENT-CLASS-325-55	c07	N72-25173
US-PATENT-CLASS-324-78D	c09	N72-25257	US-PATENT-CLASS-325-58	c07	N72-11149
US-PATENT-CLASS-324-78D	c52	N74-12778	US-PATENT-CLASS-325-58	c07	N72-20140
US-PATENT-CLASS-324-78E	c14	N73-24473	US-PATENT-CLASS-325-58	c07	N72-25173
US-PATENT-CLASS-324-78J	c10	N73-25240	US-PATENT-CLASS-325-60	c08	N71-19763
US-PATENT-CLASS-324-78J	c33	N75-19515	US-PATENT-CLASS-325-60	c07	N73-16121
US-PATENT-CLASS-324-79D	c14	N73-30386	US-PATENT-CLASS-325-60	c32	N75-24981
US-PATENT-CLASS-324-79D	c33	N76-16331	US-PATENT-CLASS-325-61	c07	N73-25160
US-PATENT-CLASS-324-79R	c14	N72-27408	US-PATENT-CLASS-325-62	c08	N72-25208

NUMBER INDEX

US-PATENT-CLASS-325-62	.....	c44 N74-19870	US-PATENT-CLASS-328-41	.....	c33 N75-31330
US-PATENT-CLASS-325-63	.....	c10 N71-19467	US-PATENT-CLASS-328-42	.....	c08 N71-19432
US-PATENT-CLASS-325-63	.....	c07 N73-20174	US-PATENT-CLASS-328-44	.....	c08 N71-29034
US-PATENT-CLASS-325-64	.....	c07 N72-25173	US-PATENT-CLASS-328-48	.....	c14 N73-30386
US-PATENT-CLASS-325-65	.....	c07 N70-41331	US-PATENT-CLASS-328-48	.....	c33 N74-10223
US-PATENT-CLASS-325-65	.....	c07 N70-41372	US-PATENT-CLASS-328-49	.....	c10 N71-27137
US-PATENT-CLASS-325-65	.....	c07 N71-11284	US-PATENT-CLASS-328-58	.....	c08 N71-29138
US-PATENT-CLASS-325-65	.....	c32 N77-30308	US-PATENT-CLASS-328-58	.....	c33 N74-32711
US-PATENT-CLASS-325-67	.....	c07 N71-26292	US-PATENT-CLASS-328-58	.....	c33 N75-18479
US-PATENT-CLASS-325-67	.....	c10 N73-25241	US-PATENT-CLASS-328-59	.....	c33 N75-19515
US-PATENT-CLASS-325-67	.....	c35 N75-21582	US-PATENT-CLASS-328-61	.....	c09 N71-23525
US-PATENT-CLASS-325-113	.....	c07 N71-24840	US-PATENT-CLASS-328-61	.....	c10 N73-20254
US-PATENT-CLASS-325-113	.....	c07 N73-25160	US-PATENT-CLASS-328-61	.....	c35 N75-30504
US-PATENT-CLASS-325-113	.....	c52 N74-26625	US-PATENT-CLASS-328-62	.....	c35 N75-30504
US-PATENT-CLASS-325-114	.....	c07 N72-25171	US-PATENT-CLASS-328-63	.....	c33 N76-14371
US-PATENT-CLASS-325-114	.....	c03 N76-32140	US-PATENT-CLASS-328-63	.....	c33 N77-24375
US-PATENT-CLASS-325-115	.....	c03 N76-32140	US-PATENT-CLASS-328-67	.....	c10 N71-28960
US-PATENT-CLASS-325-139	.....	c07 N73-25160	US-PATENT-CLASS-328-92	.....	c10 N71-28860
US-PATENT-CLASS-325-141	.....	c07 N72-25173	US-PATENT-CLASS-328-104	.....	c08 N72-22162
US-PATENT-CLASS-325-141	.....	c52 N74-26625	US-PATENT-CLASS-328-104	.....	c10 N73-13235
US-PATENT-CLASS-325-143	.....	c05 N71-12342	US-PATENT-CLASS-328-106	.....	c09 N72-22201
US-PATENT-CLASS-325-145	.....	c32 N77-14292	US-PATENT-CLASS-328-110	.....	c09 N71-12519
US-PATENT-CLASS-325-148	.....	c32 N74-19790	US-PATENT-CLASS-328-111	.....	c60 N77-12721
US-PATENT-CLASS-325-151	.....	c08 N71-27057	US-PATENT-CLASS-328-115	.....	c33 N75-18479
US-PATENT-CLASS-325-163	.....	c07 N71-23405	US-PATENT-CLASS-328-116	.....	c09 N69-39885
US-PATENT-CLASS-325-185	.....	c07 N71-28430	US-PATENT-CLASS-328-120	.....	c09 N71-27016
US-PATENT-CLASS-325-186	.....	c03 N76-32140	US-PATENT-CLASS-328-123	.....	c60 N74-12888
US-PATENT-CLASS-325-302	.....	c07 N72-25173	US-PATENT-CLASS-328-129	.....	c14 N73-30386
US-PATENT-CLASS-325-304	.....	c32 N76-14321	US-PATENT-CLASS-328-133	.....	c09 N71-24596
US-PATENT-CLASS-325-305	.....	c07 N71-10775	US-PATENT-CLASS-328-133	.....	c10 N72-20224
US-PATENT-CLASS-325-305	.....	c10 N71-20841	US-PATENT-CLASS-328-133	.....	c33 N75-26243
US-PATENT-CLASS-325-305	.....	c07 N71-23098	US-PATENT-CLASS-328-133	.....	c33 N77-13315
US-PATENT-CLASS-325-306	.....	c32 N76-14321	US-PATENT-CLASS-328-134	.....	c08 N71-18692
US-PATENT-CLASS-325-320	.....	c33 N74-12887	US-PATENT-CLASS-328-134	.....	c14 N73-30386
US-PATENT-CLASS-325-320	.....	c32 N74-20809	US-PATENT-CLASS-328-134	.....	c33 N76-16331
US-PATENT-CLASS-325-320	.....	c32 N74-20811	US-PATENT-CLASS-328-136	.....	c09 N72-25257
US-PATENT-CLASS-325-320	.....	c33 N74-27705	US-PATENT-CLASS-328-140	.....	c09 N72-25257
US-PATENT-CLASS-325-321	.....	c07 N72-20140	US-PATENT-CLASS-328-142	.....	c09 N72-21245
US-PATENT-CLASS-325-321	.....	c32 N74-20810	US-PATENT-CLASS-328-145	.....	c09 N72-23173
US-PATENT-CLASS-325-321	.....	c32 N76-16249	US-PATENT-CLASS-328-145	.....	c32 N76-14321
US-PATENT-CLASS-325-323	.....	c32 N77-10392	US-PATENT-CLASS-328-151	.....	c09 N72-22200
US-PATENT-CLASS-325-325	.....	c07 N71-24613	US-PATENT-CLASS-328-151	.....	c33 N75-18479
US-PATENT-CLASS-325-325	.....	c07 N72-25173	US-PATENT-CLASS-328-154	.....	c08 N72-22162
US-PATENT-CLASS-325-325	.....	c07 N73-13149	US-PATENT-CLASS-328-154	.....	c10 N73-13235
US-PATENT-CLASS-325-346	.....	c10 N73-16205	US-PATENT-CLASS-328-154	.....	c33 N74-22814
US-PATENT-CLASS-325-346	.....	c32 N74-30523	US-PATENT-CLASS-328-155	.....	c10 N72-16172
US-PATENT-CLASS-325-346	.....	c32 N77-24331	US-PATENT-CLASS-328-155	.....	c09 N72-33204
US-PATENT-CLASS-325-347	.....	c07 N71-33696	US-PATENT-CLASS-328-155	.....	c33 N74-17927
US-PATENT-CLASS-325-348	.....	c07 N71-33696	US-PATENT-CLASS-328-155	.....	c17 N76-22245
US-PATENT-CLASS-325-349	.....	c32 N77-10392	US-PATENT-CLASS-328-160	.....	c32 N74-19788
US-PATENT-CLASS-325-363	.....	c07 N71-11267	US-PATENT-CLASS-328-161	.....	c33 N77-17354
US-PATENT-CLASS-325-363	.....	c14 N71-26774	US-PATENT-CLASS-328-164	.....	c07 N71-33696
US-PATENT-CLASS-325-363	.....	c14 N72-28437	US-PATENT-CLASS-328-165	.....	c09 N71-24806
US-PATENT-CLASS-325-363	.....	c10 N73-25241	US-PATENT-CLASS-328-165	.....	c07 N71-33696
US-PATENT-CLASS-325-369	.....	c07 N71-27056	US-PATENT-CLASS-328-166	.....	c10 N72-20223
US-PATENT-CLASS-325-372	.....	c32 N76-14321	US-PATENT-CLASS-328-167	.....	c10 N71-22986
US-PATENT-CLASS-325-373	.....	c07 N72-33146	US-PATENT-CLASS-328-167	.....	c08 N71-29034
US-PATENT-CLASS-325-419	.....	c10 N73-16205	US-PATENT-CLASS-328-167	.....	c10 N72-17171
US-PATENT-CLASS-325-419	.....	c07 N73-28012	US-PATENT-CLASS-328-167	.....	c09 N72-21245
US-PATENT-CLASS-325-419	.....	c32 N74-20810	US-PATENT-CLASS-328-167	.....	c09 N73-20231
US-PATENT-CLASS-325-419	.....	c32 N74-20811	US-PATENT-CLASS-328-167	.....	c08 N73-26175
US-PATENT-CLASS-325-420	.....	c07 N73-30113	US-PATENT-CLASS-328-168	.....	c32 N74-19788
US-PATENT-CLASS-325-422	.....	c07 N73-30113	US-PATENT-CLASS-328-171	.....	c10 N71-24844
US-PATENT-CLASS-325-423	.....	c32 N74-20809	US-PATENT-CLASS-328-172	.....	c32 N74-19788
US-PATENT-CLASS-325-445	.....	c07 N72-20141	US-PATENT-CLASS-328-186	.....	c09 N72-17157
US-PATENT-CLASS-325-446	.....	c09 N69-24324	US-PATENT-CLASS-328-187	.....	c10 N73-20254
US-PATENT-CLASS-325-473	.....	c07 N71-33696	US-PATENT-CLASS-328-189	.....	c14 N72-27408
US-PATENT-CLASS-325-473	.....	c10 N73-12244	US-PATENT-CLASS-328-190	.....	c33 N76-14371
US-PATENT-CLASS-325-473	.....	c32 N77-30308	US-PATENT-CLASS-328-207	.....	c09 N71-28468
US-PATENT-CLASS-325-476	.....	c32 N77-10392	US-PATENT-CLASS-328-207	.....	c10 N71-28860
US-PATENT-CLASS-325-478	.....	c07 N71-33696	US-PATENT-CLASS-328-207	.....	c09 N71-29139
US-PATENT-CLASS-325-480	.....	c07 N71-33696	US-PATENT-CLASS-328-207	.....	c10 N72-20221
US-PATENT-CLASS-325-480	.....	c10 N73-12244	US-PATENT-CLASS-328-233	.....	c10 N71-22962
US-PATENT-CLASS-325-482	.....	c07 N71-33696	US-PATENT-CLASS-328-233	.....	c75 N75-13625
US-PATENT-CLASS-325-492	.....	c09 N72-17153	US-PATENT-CLASS-329-50	.....	c33 N74-17930
US-PATENT-CLASS-325-492	.....	c09 N72-22202	US-PATENT-CLASS-329-104	.....	c07 N71-11282
US-PATENT-CLASS-328-1	.....	c23 N71-16099	US-PATENT-CLASS-329-104	.....	c33 N74-12887
US-PATENT-CLASS-328-1	.....	c10 N71-19472	US-PATENT-CLASS-329-104	.....	c32 N77-24331
US-PATENT-CLASS-328-1	.....	c09 N72-22200	US-PATENT-CLASS-329-119	.....	c33 N77-21314
US-PATENT-CLASS-328-4-8	.....	c33 N77-24375	US-PATENT-CLASS-329-120	.....	c07 N73-30113
US-PATENT-CLASS-328-16	.....	c10 N72-20223	US-PATENT-CLASS-329-122	.....	c10 N71-19469
US-PATENT-CLASS-328-20	.....	c10 N72-20223	US-PATENT-CLASS-329-122	.....	c07 N73-28012
US-PATENT-CLASS-328-24	.....	c09 N72-33204	US-PATENT-CLASS-329-122	.....	c33 N74-12887
US-PATENT-CLASS-328-37	.....	c08 N71-12503	US-PATENT-CLASS-329-122	.....	c32 N74-20811
US-PATENT-CLASS-328-37	.....	c10 N73-20254	US-PATENT-CLASS-329-122	.....	c33 N77-14334
US-PATENT-CLASS-328-37	.....	c33 N76-14373	US-PATENT-CLASS-329-122	.....	c32 N77-24331
US-PATENT-CLASS-328-38	.....	c10 N72-20223	US-PATENT-CLASS-329-124	.....	c33 N77-14334
US-PATENT-CLASS-328-38	.....	c33 N77-24375	US-PATENT-CLASS-329-126	.....	c33 N74-12887
US-PATENT-CLASS-328-39	.....	c33 N77-24375	US-PATENT-CLASS-329-140	.....	c07 N71-24583

NUMBER INDEX

US-PATENT-CLASS-329-145	c07	N71-33696	US-PATENT-CLASS-330-176	c10	N72-17171
US-PATENT-CLASS-329-161	c07	N72-20141	US-PATENT-CLASS-330-200	c07	N71-28830
US-PATENT-CLASS-329-162	c07	N72-20141	US-PATENT-CLASS-330-207A	c33	N75-30429
US-PATENT-CLASS-329-166	c33	N75-19520	US-PATENT-CLASS-331-DIG.1	c36	N75-30524
US-PATENT-CLASS-329-166	c33	N75-25041	US-PATENT-CLASS-331-1A	c33	N74-10194
US-PATENT-CLASS-329-204	c33	N75-19520	US-PATENT-CLASS-331-1A	c33	N75-25040
US-PATENT-CLASS-329-204	c33	N75-25041	US-PATENT-CLASS-331-3	c35	N76-15436
US-PATENT-CLASS-329-205	c33	N77-21314	US-PATENT-CLASS-331-4	c09	N69-21543
US-PATENT-CLASS-330-2	c09	N69-39986	US-PATENT-CLASS-331-4	c33	N74-10194
US-PATENT-CLASS-330-2	c09	N72-25250	US-PATENT-CLASS-331-7	c07	N72-11150
US-PATENT-CLASS-330-4	c16	N71-15550	US-PATENT-CLASS-331-10	c07	N72-11150
US-PATENT-CLASS-330-4	c16	N71-24831	US-PATENT-CLASS-331-14	c09	N72-21247
US-PATENT-CLASS-330-4	c16	N72-28521	US-PATENT-CLASS-331-14	c33	N74-10194
US-PATENT-CLASS-330-4	c36	N75-15029	US-PATENT-CLASS-331-17	c10	N71-20852
US-PATENT-CLASS-330-4	c36	N76-31512	US-PATENT-CLASS-331-17	c10	N73-21711
US-PATENT-CLASS-330-4.3	c16	N73-32391	US-PATENT-CLASS-331-17	c33	N74-10194
US-PATENT-CLASS-330-4.3	c36	N75-19655	US-PATENT-CLASS-331-18	c10	N71-26374
US-PATENT-CLASS-330-4.3	c36	N75-27364	US-PATENT-CLASS-331-18	c33	N74-10194
US-PATENT-CLASS-330-4.3	c36	N75-32441	US-PATENT-CLASS-331-18	c33	N75-25040
US-PATENT-CLASS-330-4.3	c36	N76-29575	US-PATENT-CLASS-331-23	c09	N72-21247
US-PATENT-CLASS-330-4.3	c36	N77-25502	US-PATENT-CLASS-331-23	c33	N77-14334
US-PATENT-CLASS-330-4.5	c09	N72-25258	US-PATENT-CLASS-331-25	c10	N73-21711
US-PATENT-CLASS-330-4.9	c33	N74-32660	US-PATENT-CLASS-331-25	c33	N75-25040
US-PATENT-CLASS-330-5	c33	N75-27251	US-PATENT-CLASS-331-30	c09	N72-21247
US-PATENT-CLASS-330-5.5	c71	N77-26919	US-PATENT-CLASS-331-34	c07	N72-11150
US-PATENT-CLASS-330-6	c35	N75-13213	US-PATENT-CLASS-331-36C	c33	N77-14334
US-PATENT-CLASS-330-9	c33	N74-14939	US-PATENT-CLASS-331-44	c14	N72-27408
US-PATENT-CLASS-330-10	c33	N74-14939	US-PATENT-CLASS-331-45	c10	N73-16206
US-PATENT-CLASS-330-11	c09	N71-13531	US-PATENT-CLASS-331-62	c33	N74-11049
US-PATENT-CLASS-330-11	c10	N71-33129	US-PATENT-CLASS-331-65	c35	N75-29380
US-PATENT-CLASS-330-11	c09	N72-17156	US-PATENT-CLASS-331-66	c07	N72-11150
US-PATENT-CLASS-330-12	c10	N72-33230	US-PATENT-CLASS-331-78	c09	N71-23598
US-PATENT-CLASS-330-13	c10	N71-26415	US-PATENT-CLASS-331-78	c08	N73-12175
US-PATENT-CLASS-330-13	c33	N75-30428	US-PATENT-CLASS-331-78	c33	N75-19515
US-PATENT-CLASS-330-14	c09	N70-35440	US-PATENT-CLASS-331-90	c09	N73-15235
US-PATENT-CLASS-330-14	c33	N77-14335	US-PATENT-CLASS-331-94	c16	N70-41578
US-PATENT-CLASS-330-16	c10	N71-33129	US-PATENT-CLASS-331-94	c16	N72-28521
US-PATENT-CLASS-330-18	c09	N72-17155	US-PATENT-CLASS-331-94	c16	N73-13489
US-PATENT-CLASS-330-18	c33	N75-30428	US-PATENT-CLASS-331-94	c35	N76-15436
US-PATENT-CLASS-330-20	c09	N73-20232	US-PATENT-CLASS-331-94	c36	N76-31512
US-PATENT-CLASS-330-22	c09	N71-10798	US-PATENT-CLASS-331-94.5	c16	N71-18614
US-PATENT-CLASS-330-22	c09	N73-20232	US-PATENT-CLASS-331-94.5	c16	N71-24832
US-PATENT-CLASS-330-24	c10	N71-33129	US-PATENT-CLASS-331-94.5	c23	N71-26722
US-PATENT-CLASS-330-24	c33	N75-30429	US-PATENT-CLASS-331-94.5	c15	N71-27135
US-PATENT-CLASS-330-26	c10	N72-17172	US-PATENT-CLASS-331-94.5	c23	N71-29125
US-PATENT-CLASS-330-27R	c10	N72-31273	US-PATENT-CLASS-331-94.5	c16	N71-33410
US-PATENT-CLASS-330-28	c33	N74-21851	US-PATENT-CLASS-331-94.5	c16	N72-12440
US-PATENT-CLASS-330-28	c33	N77-14335	US-PATENT-CLASS-331-94.5	c25	N72-24753
US-PATENT-CLASS-330-29	c09	N69-24330	US-PATENT-CLASS-331-94.5	c16	N72-25485
US-PATENT-CLASS-330-29	c10	N72-28241	US-PATENT-CLASS-331-94.5	c07	N73-26119
US-PATENT-CLASS-330-30	c09	N71-19466	US-PATENT-CLASS-331-94.5	c09	N73-32111
US-PATENT-CLASS-330-30	c09	N71-19516	US-PATENT-CLASS-331-94.5	c16	N73-32391
US-PATENT-CLASS-330-30	c09	N71-27016	US-PATENT-CLASS-331-94.5	c36	N76-18427
US-PATENT-CLASS-330-30D	c10	N72-20221	US-PATENT-CLASS-331-94.5A	c16	N73-33397
US-PATENT-CLASS-330-30D	c09	N73-20232	US-PATENT-CLASS-331-94.5A	c36	N75-27364
US-PATENT-CLASS-330-31	c10	N71-26331	US-PATENT-CLASS-331-94.5C	c36	N75-31427
US-PATENT-CLASS-330-31	c10	N72-17172	US-PATENT-CLASS-331-94.5C	c36	N76-18428
US-PATENT-CLASS-330-35	c09	N72-17156	US-PATENT-CLASS-331-94.5C	c36	N76-24553
US-PATENT-CLASS-330-35	c09	N73-20232	US-PATENT-CLASS-331-94.5C	c36	N76-29575
US-PATENT-CLASS-330-35	c33	N74-14939	US-PATENT-CLASS-331-94.5D	c33	N74-20859
US-PATENT-CLASS-330-40	c07	N71-28430	US-PATENT-CLASS-331-94.5D	c36	N77-19416
US-PATENT-CLASS-330-40	c09	N72-17155	US-PATENT-CLASS-331-94.5D	c36	N72-25502
US-PATENT-CLASS-330-40	c09	N73-20232	US-PATENT-CLASS-331-94.5D	c35	N77-27366
US-PATENT-CLASS-330-40	c33	N75-30428	US-PATENT-CLASS-331-94.5G	c36	N75-31426
US-PATENT-CLASS-330-49	c14	N70-35220	US-PATENT-CLASS-331-94.5G	c36	N77-19416
US-PATENT-CLASS-330-51	c10	N71-28859	US-PATENT-CLASS-331-94.5K	c36	N74-15145
US-PATENT-CLASS-330-53	c33	N74-32660	US-PATENT-CLASS-331-94.5H	c36	N75-19654
US-PATENT-CLASS-330-59	c09	N72-25250	US-PATENT-CLASS-331-94.5P	c36	N75-19655
US-PATENT-CLASS-330-59	c33	N74-21851	US-PATENT-CLASS-331-94.5P	c36	N75-31426
US-PATENT-CLASS-330-59	c33	N77-14335	US-PATENT-CLASS-331-94.5P	c36	N77-25502
US-PATENT-CLASS-330-61	c09	N71-23097	US-PATENT-CLASS-331-94.5PE	c36	N75-32441
US-PATENT-CLASS-330-63	c33	N75-30428	US-PATENT-CLASS-331-94.5PE	c36	N77-19416
US-PATENT-CLASS-330-69	c33	N74-32712	US-PATENT-CLASS-331-94.5S	c36	N74-15145
US-PATENT-CLASS-330-69	c33	N75-19518	US-PATENT-CLASS-331-94.5S	c36	N77-25499
US-PATENT-CLASS-330-70CR	c10	N73-27171	US-PATENT-CLASS-331-94.5T	c35	N77-27366
US-PATENT-CLASS-330-70R	c09	N72-21245	US-PATENT-CLASS-331-94.5G	c36	N75-32441
US-PATENT-CLASS-330-80T	c09	N73-20232	US-PATENT-CLASS-331-107	c09	N71-18721
US-PATENT-CLASS-330-85	c09	N72-21245	US-PATENT-CLASS-331-107	c26	N72-21701
US-PATENT-CLASS-330-86	c09	N73-20231	US-PATENT-CLASS-331-107A	c71	N77-26919
US-PATENT-CLASS-330-86	c33	N75-19518	US-PATENT-CLASS-331-107G	c26	N72-25679
US-PATENT-CLASS-330-94	c10	N72-17172	US-PATENT-CLASS-331-107G	c09	N73-15235
US-PATENT-CLASS-330-103	c32	N74-22096	US-PATENT-CLASS-331-108A	c33	N74-20862
US-PATENT-CLASS-330-107	c10	N72-11256	US-PATENT-CLASS-331-109	c10	N71-27271
US-PATENT-CLASS-330-107	c10	N72-17172	US-PATENT-CLASS-331-109	c33	N74-26732
US-PATENT-CLASS-330-109	c10	N72-11256	US-PATENT-CLASS-331-111	c10	N71-23669
US-PATENT-CLASS-330-109	c10	N72-17171	US-PATENT-CLASS-331-111	c09	N72-21247
US-PATENT-CLASS-330-109	c10	N72-17172	US-PATENT-CLASS-331-113	c09	N70-38995
US-PATENT-CLASS-330-109	c09	N73-20231	US-PATENT-CLASS-331-113	c10	N71-19418
US-PATENT-CLASS-330-124	c07	N71-28430	US-PATENT-CLASS-331-113	c09	N71-19470

NUMBER INDEX

US-PATENT-CLASS-331-113	c10	N71-25882	US-PATENT-CLASS-333-95	c07	N71-27191
US-PATENT-CLASS-331-113	c10	N71-25950	US-PATENT-CLASS-333-96	c09	N71-20445
US-PATENT-CLASS-331-113	c09	N71-28810	US-PATENT-CLASS-333-96	c07	N71-27191
US-PATENT-CLASS-331-113A	c09	N72-25253	US-PATENT-CLASS-333-97	c07	N69-27462
US-PATENT-CLASS-331-113A	c09	N72-25254	US-PATENT-CLASS-333-97R	c36	N74-11313
US-PATENT-CLASS-331-113A	c33	N74-11049	US-PATENT-CLASS-333-98	c09	N71-23548
US-PATENT-CLASS-331-114	c33	N77-17351	US-PATENT-CLASS-333-98	c09	N71-24808
US-PATENT-CLASS-331-115	c10	N72-33230	US-PATENT-CLASS-333-98P	c07	N72-25170
US-PATENT-CLASS-331-115	c33	N74-20862	US-PATENT-CLASS-333-98P	c09	N72-29172
US-PATENT-CLASS-331-116R	c10	N72-33230	US-PATENT-CLASS-333-98R	c07	N72-25170
US-PATENT-CLASS-331-116R	c33	N74-20862	US-PATENT-CLASS-333-98R	c09	N72-29172
US-PATENT-CLASS-331-117	c10	N71-27271	US-PATENT-CLASS-333-98R	c14	N73-13420
US-PATENT-CLASS-331-117	c09	N72-22203	US-PATENT-CLASS-333-98R	c33	N75-30430
US-PATENT-CLASS-331-117R	c33	N74-26732	US-PATENT-CLASS-333-98S	c07	N72-25170
US-PATENT-CLASS-331-135	c10	N73-32145	US-PATENT-CLASS-335-205	c09	N72-20199
US-PATENT-CLASS-331-159	c33	N74-20862	US-PATENT-CLASS-335-216	c16	N71-28554
US-PATENT-CLASS-331-177	c10	N71-27271	US-PATENT-CLASS-335-216	c23	N71-29049
US-PATENT-CLASS-331-177R	c09	N73-15235	US-PATENT-CLASS-335-216	c26	N73-32571
US-PATENT-CLASS-331-177V	c33	N77-17351	US-PATENT-CLASS-335-216	c20	N75-24837
US-PATENT-CLASS-331-178	c33	N74-10194	US-PATENT-CLASS-335-296	c09	N73-30185
US-PATENT-CLASS-331-1E3	c33	N74-26732	US-PATENT-CLASS-335-297	c09	N73-30185
US-PATENT-CLASS-332-1	c10	N71-23084	US-PATENT-CLASS-335-300	c09	N70-41929
US-PATENT-CLASS-332-2	c35	N75-19614	US-PATENT-CLASS-336-DIG.1	c26	N73-26752
US-PATENT-CLASS-332-7.5	c36	N75-15029	US-PATENT-CLASS-336-60	c09	N72-27226
US-PATENT-CLASS-332-7.51	c16	N72-25485	US-PATENT-CLASS-336-178	c09	N72-17154
US-PATENT-CLASS-332-7.51	c07	N73-26119	US-PATENT-CLASS-336-198	c09	N72-27226
US-PATENT-CLASS-332-7.51	c33	N74-20859	US-PATENT-CLASS-336-200	c26	N73-26752
US-PATENT-CLASS-332-7.51	c36	N76-18427	US-PATENT-CLASS-336-210	c33	N74-17928
US-PATENT-CLASS-332-9	c07	N71-12390	US-PATENT-CLASS-336-220	c09	N72-27226
US-PATENT-CLASS-332-9R	c08	N71-29138	US-PATENT-CLASS-337-75	c15	N72-12409
US-PATENT-CLASS-332-10	c08	N71-29138	US-PATENT-CLASS-337-114	c09	N71-29035
US-PATENT-CLASS-332-11D	c35	N74-17885	US-PATENT-CLASS-337-121	c09	N71-29035
US-PATENT-CLASS-332-16	c33	N77-21314	US-PATENT-CLASS-337-334	c37	N77-19458
US-PATENT-CLASS-332-18	c33	N77-17351	US-PATENT-CLASS-337-354	c15	N72-12409
US-PATENT-CLASS-332-19	c10	N71-23544	US-PATENT-CLASS-337-359	c15	N72-12409
US-PATENT-CLASS-332-21	c08	N72-25208	US-PATENT-CLASS-338-2	c33	N75-31329
US-PATENT-CLASS-332-22	c32	N77-14292	US-PATENT-CLASS-338-5	c32	N71-15974
US-PATENT-CLASS-332-23R	c32	N77-14292	US-PATENT-CLASS-338-5	c52	N74-27864
US-PATENT-CLASS-332-29	c07	N71-28429	US-PATENT-CLASS-338-6	c35	N76-14430
US-PATENT-CLASS-332-30	c10	N71-27271	US-PATENT-CLASS-338-6	c52	N76-29895
US-PATENT-CLASS-332-30	c07	N71-28429	US-PATENT-CLASS-338-13	c24	N75-30260
US-PATENT-CLASS-332-30	c33	N77-21314	US-PATENT-CLASS-338-25	c35	N77-21393
US-PATENT-CLASS-332-30V	c33	N77-14334	US-PATENT-CLASS-338-28	c35	N77-20400
US-PATENT-CLASS-332-30V	c33	N77-17351	US-PATENT-CLASS-338-28	c35	N77-24454
US-PATENT-CLASS-332-31	c08	N71-12500	US-PATENT-CLASS-338-64	c09	N71-21583
US-PATENT-CLASS-332-31	c26	N72-21701	US-PATENT-CLASS-338-75	c37	N75-13265
US-PATENT-CLASS-332-47	c33	N75-19520	US-PATENT-CLASS-338-82	c09	N71-20842
US-PATENT-CLASS-332-51W	c07	N72-20141	US-PATENT-CLASS-338-89	c35	N74-32877
US-PATENT-CLASS-332-52	c33	N77-21314	US-PATENT-CLASS-338-97	c37	N75-13265
US-PATENT-CLASS-333-6	c07	N71-33606	US-PATENT-CLASS-338-114	c52	N74-27864
US-PATENT-CLASS-333-7	c7	N71-33606	US-PATENT-CLASS-338-162	c37	N75-13265
US-PATENT-CLASS-333-7	c07	N72-25170	US-PATENT-CLASS-338-229	c35	N77-24454
US-PATENT-CLASS-333-8	c07	N69-24334	US-PATENT-CLASS-338-283	c24	N75-30260
US-PATENT-CLASS-333-14	c32	N74-19788	US-PATENT-CLASS-338-320	c33	N74-14935
US-PATENT-CLASS-333-16	c33	N74-17927	US-PATENT-CLASS-339-5	c15	N71-23049
US-PATENT-CLASS-333-17	c44	N74-19870	US-PATENT-CLASS-339-17	c14	N69-27431
US-PATENT-CLASS-333-18	c33	N74-17927	US-PATENT-CLASS-339-17	c15	N71-17685
US-PATENT-CLASS-333-18	c32	N76-21366	US-PATENT-CLASS-339-17	c09	N71-26133
US-PATENT-CLASS-333-21	c07	N71-10676	US-PATENT-CLASS-339-17H	c37	N76-27567
US-PATENT-CLASS-333-21A	c7	N71-33606	US-PATENT-CLASS-339-17R	c15	N71-29133
US-PATENT-CLASS-333-21R	c33	N75-30430	US-PATENT-CLASS-339-18C	c37	N76-27567
US-PATENT-CLASS-333-24R	c09	N72-29172	US-PATENT-CLASS-339-45H	c15	N72-25450
US-PATENT-CLASS-333-30	c10	N71-25900	US-PATENT-CLASS-339-46	c15	N72-17455
US-PATENT-CLASS-333-70CR	c10	N72-17171	US-PATENT-CLASS-339-75HP	c09	N72-28225
US-PATENT-CLASS-333-70R	c32	N77-18307	US-PATENT-CLASS-339-91	c09	N69-21927
US-PATENT-CLASS-333-72	c10	N71-25900	US-PATENT-CLASS-339-91B	c15	N72-25450
US-PATENT-CLASS-333-72	c71	N77-26919	US-PATENT-CLASS-339-94H	c09	N72-28225
US-PATENT-CLASS-333-73	c07	N69-24323	US-PATENT-CLASS-339-95	c09	N69-39734
US-PATENT-CLASS-333-73	c09	N71-23573	US-PATENT-CLASS-339-143C	c33	N76-16332
US-PATENT-CLASS-333-73R	c09	N73-26195	US-PATENT-CLASS-339-143R	c09	N72-25256
US-PATENT-CLASS-333-73S	c09	N73-26195	US-PATENT-CLASS-339-147R	c09	N72-25256
US-PATENT-CLASS-333-73W	c07	N72-20141	US-PATENT-CLASS-339-150	c09	N69-21470
US-PATENT-CLASS-333-75	c32	N77-18307	US-PATENT-CLASS-339-176	c09	N70-34596
US-PATENT-CLASS-333-76	c32	N77-18307	US-PATENT-CLASS-339-176	c09	N70-36494
US-PATENT-CLASS-333-79	c10	N70-41964	US-PATENT-CLASS-339-176H	c15	N72-17455
US-PATENT-CLASS-333-79	c09	N72-25256	US-PATENT-CLASS-339-176HP	c09	N72-28225
US-PATENT-CLASS-333-80	c09	N71-12517	US-PATENT-CLASS-339-177	c09	N71-20851
US-PATENT-CLASS-333-80	c09	N72-21245	US-PATENT-CLASS-339-198R	c33	N76-16332
US-PATENT-CLASS-333-80R	c33	N74-32712	US-PATENT-CLASS-339-210H	c09	N72-28225
US-PATENT-CLASS-333-80T	c10	N72-33230	US-PATENT-CLASS-339-242	c33	N76-16332
US-PATENT-CLASS-333-81	c07	N71-29065	US-PATENT-CLASS-339-252R	c52	N77-14738
US-PATENT-CLASS-333-81B	c14	N73-13420	US-PATENT-CLASS-339-275R	c33	N76-16332
US-PATENT-CLASS-333-81R	c07	N72-25170	US-PATENT-CLASS-339-275T	c09	N72-20200
US-PATENT-CLASS-333-82A	c09	N73-26195	US-PATENT-CLASS-339-276T	c09	N72-20200
US-PATENT-CLASS-333-82B	c32	N77-18307	US-PATENT-CLASS-339-278H	c15	N72-17455
US-PATENT-CLASS-333-83	c09	N71-24841	US-PATENT-CLASS-339-12R	c52	N77-25772
US-PATENT-CLASS-333-83BT	c33	N75-30430	US-PATENT-CLASS-340-5C	c14	N73-27379
US-PATENT-CLASS-333-83R	c36	N74-11313	US-PATENT-CLASS-340-5H	c32	N77-21267
US-PATENT-CLASS-333-84H	c09	N73-26195	US-PATENT-CLASS-340-5R	c35	N74-16135

NUMBER INDEX

US-PATENT-CLASS-340-8R	c35	N74-16135	US-PATENT-CLASS-340-174.1R	c21	N73-13644
US-PATENT-CLASS-340-12R	c35	N74-16135	US-PATENT-CLASS-340-174AG	c23	N72-17747
US-PATENT-CLASS-340-15.5GC	c14	N73-26432	US-PATENT-CLASS-340-174CS	c08	N72-21199
US-PATENT-CLASS-340-25	c14	N73-16483	US-PATENT-CLASS-340-174CT	c23	N72-17747
US-PATENT-CLASS-340-26	c21	N72-22619	US-PATENT-CLASS-340-174GA	c23	N72-17747
US-PATENT-CLASS-340-27AT	c21	N73-14692	US-PATENT-CLASS-340-174LC	c08	N72-21199
US-PATENT-CLASS-340-27NA	c21	N73-13643	US-PATENT-CLASS-340-174M	c08	N72-21199
US-PATENT-CLASS-340-27R	c14	N73-16483	US-PATENT-CLASS-340-174MA	c24	N75-13032
US-PATENT-CLASS-340-27R	c14	N73-20474	US-PATENT-CLASS-340-174SC	c23	N72-17747
US-PATENT-CLASS-340-33	c21	N73-13643	US-PATENT-CLASS-340-174SR	c08	N72-21199
US-PATENT-CLASS-340-38P	c66	N76-19888	US-PATENT-CLASS-340-174YC	c36	N74-13205
US-PATENT-CLASS-340-57	c14	N71-15620	US-PATENT-CLASS-340-177	c09	N72-17153
US-PATENT-CLASS-340-97	c21	N73-13643	US-PATENT-CLASS-340-182	c33	N74-27862
US-PATENT-CLASS-340-146.1	c09	N71-18843	US-PATENT-CLASS-340-183	c52	N74-26625
US-PATENT-CLASS-340-146.1	c08	N71-22749	US-PATENT-CLASS-340-189M	c17	N76-29347
US-PATENT-CLASS-340-146.1	c10	N71-26103	US-PATENT-CLASS-340-198	c14	N70-33179
US-PATENT-CLASS-340-146.1	c08	N71-27255	US-PATENT-CLASS-340-198	c07	N71-11298
US-PATENT-CLASS-340-146.1	c08	N72-22167	US-PATENT-CLASS-340-200	c33	N74-27862
US-PATENT-CLASS-340-146.1	c08	N72-25207	US-PATENT-CLASS-340-200	c33	N77-31404
US-PATENT-CLASS-340-146.1	c07	N73-13149	US-PATENT-CLASS-340-203	c09	N72-22202
US-PATENT-CLASS-340-146.1AI	c08	N72-25210	US-PATENT-CLASS-340-203	c52	N74-26625
US-PATENT-CLASS-340-146.1AI	c08	N73-12175	US-PATENT-CLASS-340-206	c17	N76-29347
US-PATENT-CLASS-340-146.1AI	c32	N77-12240	US-PATENT-CLASS-340-207	c07	N73-25160
US-PATENT-CLASS-340-146.1AQ	c08	N73-12177	US-PATENT-CLASS-340-207P	c17	N76-22245
US-PATENT-CLASS-340-146.1AQ	c32	N74-32598	US-PATENT-CLASS-340-207R	c52	N74-26625
US-PATENT-CLASS-340-146.1AQ	c32	N77-12240	US-PATENT-CLASS-340-210	c03	N72-20031
US-PATENT-CLASS-340-146.1AV	c08	N73-12177	US-PATENT-CLASS-340-213	c10	N71-27272
US-PATENT-CLASS-340-146.1C	c32	N77-12240	US-PATENT-CLASS-340-213.1	c10	N71-19417
US-PATENT-CLASS-340-146.2	c07	N73-20176	US-PATENT-CLASS-340-223	c10	N73-32144
US-PATENT-CLASS-340-146.2	c08	N71-12505	US-PATENT-CLASS-340-224	c37	N77-19458
US-PATENT-CLASS-340-146.2	c08	N71-23295	US-PATENT-CLASS-340-227	c10	N71-16058
US-PATENT-CLASS-340-146.3P	c43	N77-10584	US-PATENT-CLASS-340-227	c14	N71-27186
US-PATENT-CLASS-340-146.3Q	c43	N77-10584	US-PATENT-CLASS-340-227R	c14	N72-25412
US-PATENT-CLASS-340-147	c09	N70-33182	US-PATENT-CLASS-340-228.2	c10	N72-17173
US-PATENT-CLASS-340-147	c09	N70-38998	US-PATENT-CLASS-340-228S	c14	N73-16484
US-PATENT-CLASS-340-147C	c60	N76-14818	US-PATENT-CLASS-340-233	c14	N71-25901
US-PATENT-CLASS-340-147R	c07	N73-20176	US-PATENT-CLASS-340-235	c10	N72-26334
US-PATENT-CLASS-340-147R	c60	N76-14818	US-PATENT-CLASS-340-237S	c45	N76-17656
US-PATENT-CLASS-340-147SY	c17	N76-22245	US-PATENT-CLASS-340-240	c09	N72-27227
US-PATENT-CLASS-340-150	c10	N71-27272	US-PATENT-CLASS-340-242	c35	N75-19612
US-PATENT-CLASS-340-151	c33	N74-27862	US-PATENT-CLASS-340-248	c10	N71-27338
US-PATENT-CLASS-340-163	c07	N73-20176	US-PATENT-CLASS-340-258	c10	N72-28240
US-PATENT-CLASS-340-164	c10	N71-27272	US-PATENT-CLASS-340-258R	c07	N73-25160
US-PATENT-CLASS-340-166	c10	N71-27272	US-PATENT-CLASS-340-271	c35	N77-30436
US-PATENT-CLASS-340-166	c10	N73-32144	US-PATENT-CLASS-340-277	c10	N73-30205
US-PATENT-CLASS-340-167	c07	N72-25173	US-PATENT-CLASS-340-279	c05	N72-16015
US-PATENT-CLASS-340-171	c09	N72-22202	US-PATENT-CLASS-340-279	c10	N73-30205
US-PATENT-CLASS-340-171	c16	N73-16536	US-PATENT-CLASS-340-285	c14	N71-25901
US-PATENT-CLASS-340-172.5	c08	N69-21928	US-PATENT-CLASS-340-324	c08	N71-12507
US-PATENT-CLASS-340-172.5	c09	N69-24333	US-PATENT-CLASS-340-324	c09	N71-33519
US-PATENT-CLASS-340-172.5	c08	N71-12502	US-PATENT-CLASS-340-324A	c09	N72-25248
US-PATENT-CLASS-340-172.5	c08	N71-12506	US-PATENT-CLASS-340-324AD	c33	N75-19517
US-PATENT-CLASS-340-172.5	c31	N71-15566	US-PATENT-CLASS-340-324R	c26	N72-25680
US-PATENT-CLASS-340-172.5	c08	N71-19288	US-PATENT-CLASS-340-332	c09	N72-25250
US-PATENT-CLASS-340-172.5	c08	N71-22707	US-PATENT-CLASS-340-336	c09	N71-33519
US-PATENT-CLASS-340-172.5	c08	N71-22710	US-PATENT-CLASS-340-347	c08	N70-35423
US-PATENT-CLASS-340-172.5	c07	N71-24624	US-PATENT-CLASS-340-347	c08	N70-40125
US-PATENT-CLASS-340-172.5	c08	N71-27255	US-PATENT-CLASS-340-347	c08	N71-12501
US-PATENT-CLASS-340-172.5	c07	N72-25172	US-PATENT-CLASS-340-347	c08	N71-18594
US-PATENT-CLASS-340-172.5	c08	N72-25207	US-PATENT-CLASS-340-347	c08	N71-19435
US-PATENT-CLASS-340-172.5	c09	N72-25248	US-PATENT-CLASS-340-347	c08	N71-19544
US-PATENT-CLASS-340-172.5	c08	N73-13187	US-PATENT-CLASS-340-347	c08	N71-19687
US-PATENT-CLASS-340-172.5	c08	N73-26176	US-PATENT-CLASS-340-347	c08	N71-24650
US-PATENT-CLASS-340-172.5	c60	N76-18800	US-PATENT-CLASS-340-347	c10	N71-25917
US-PATENT-CLASS-340-172.5	c60	N76-21914	US-PATENT-CLASS-340-347	c10	N71-26544
US-PATENT-CLASS-340-172.5	c60	N77-12721	US-PATENT-CLASS-340-347	c08	N73-28045
US-PATENT-CLASS-340-172.5	c60	N77-14751	US-PATENT-CLASS-340-347AD	c14	N71-28991
US-PATENT-CLASS-340-172.5	c60	N77-19760	US-PATENT-CLASS-340-347AD	c08	N72-21200
US-PATENT-CLASS-340-173	c10	N73-32144	US-PATENT-CLASS-340-347AD	c08	N72-22163
US-PATENT-CLASS-340-173.2	c08	N72-21198	US-PATENT-CLASS-340-347AD	c08	N72-22166
US-PATENT-CLASS-340-173CA	c33	N75-31331	US-PATENT-CLASS-340-347AD	c08	N72-31226
US-PATENT-CLASS-340-173CR	c60	N74-12888	US-PATENT-CLASS-340-347AD	c08	N73-20217
US-PATENT-CLASS-340-173LM	c60	N74-12888	US-PATENT-CLASS-340-347AD	c35	N74-17885
US-PATENT-CLASS-340-173LS	c08	N72-21198	US-PATENT-CLASS-340-347AD	c35	N74-32877
US-PATENT-CLASS-340-173LS	c36	N75-19652	US-PATENT-CLASS-340-347AD	c33	N76-18345
US-PATENT-CLASS-340-174	c08	N71-12504	US-PATENT-CLASS-340-347AD	c60	N77-32731
US-PATENT-CLASS-340-174	c09	N71-12515	US-PATENT-CLASS-340-347DA	c08	N71-27057
US-PATENT-CLASS-340-174	c08	N71-18595	US-PATENT-CLASS-340-347DA	c08	N72-20176
US-PATENT-CLASS-340-174	c08	N71-18694	US-PATENT-CLASS-340-347DA	c08	N72-25206
US-PATENT-CLASS-340-174	c10	N71-23033	US-PATENT-CLASS-340-347DA	c08	N73-32081
US-PATENT-CLASS-340-174	c10	N71-26418	US-PATENT-CLASS-340-347DD	c10	N71-33407
US-PATENT-CLASS-340-174	c10	N71-26434	US-PATENT-CLASS-340-347DD	c08	N72-18184
US-PATENT-CLASS-340-174	c08	N71-28925	US-PATENT-CLASS-340-347DD	c08	N72-20176
US-PATENT-CLASS-340-174	c10	N71-29135	US-PATENT-CLASS-340-347DD	c08	N72-21197
US-PATENT-CLASS-340-174.1	c08	N71-21042	US-PATENT-CLASS-340-347DD	c08	N73-12176
US-PATENT-CLASS-340-174.1	c07	N71-23001	US-PATENT-CLASS-340-347DD	c60	N76-23850
US-PATENT-CLASS-340-174.1	c08	N71-27210	US-PATENT-CLASS-340-347DD	c32	N77-12239
US-PATENT-CLASS-340-174.11	c35	N74-11283	US-PATENT-CLASS-340-347P	c60	N76-23850
US-PATENT-CLASS-340-174.1H	c36	N74-13205	US-PATENT-CLASS-340-347P	c35	N77-30436

NUMBER INDEX

US-PATENT-CLASS-340-347R	c08	N72-22165	US-PATENT-CLASS-343-100ST	c17	N76-21250
US-PATENT-CLASS-340-347SH	c33	N77-31404	US-PATENT-CLASS-343-100ST	c32	N77-20289
US-PATENT-CLASS-340-347SY	c62	N76-31946	US-PATENT-CLASS-343-105R	c32	N75-26194
US-PATENT-CLASS-340-347SY	c35	N77-30436	US-PATENT-CLASS-343-108R	c04	N74-14420
US-PATENT-CLASS-340-348	c08	N72-22167	US-PATENT-CLASS-343-112	c21	N71-13958
US-PATENT-CLASS-340-403	c10	N71-27272	US-PATENT-CLASS-343-112	c02	N71-19287
US-PATENT-CLASS-340-407	c71	N74-21014	US-PATENT-CLASS-343-112	c21	N71-24948
US-PATENT-CLASS-340-412	c10	N71-24798	US-PATENT-CLASS-343-112CA	c21	N73-13643
US-PATENT-CLASS-340-415	c10	N73-32144	US-PATENT-CLASS-343-112CA	c21	N73-30641
US-PATENT-CLASS-340-418	c14	N73-16484	US-PATENT-CLASS-343-112CA	c03	N75-30132
US-PATENT-CLASS-343-DIG.2	c07	N73-24176	US-PATENT-CLASS-343-112D	c14	N72-28437
US-PATENT-CLASS-343-DIG.2	c33	N74-20860	US-PATENT-CLASS-343-112D	c32	N75-26194
US-PATENT-CLASS-343-DIG.3	c09	N72-12136	US-PATENT-CLASS-343-112B	c09	N73-32110
US-PATENT-CLASS-343-5CM	c07	N72-21118	US-PATENT-CLASS-343-112TC	c17	N76-21250
US-PATENT-CLASS-343-5CM	c32	N77-21267	US-PATENT-CLASS-343-113	c10	N71-21473
US-PATENT-CLASS-343-5CM	c32	N77-32342	US-PATENT-CLASS-343-113	c07	N71-24625
US-PATENT-CLASS-343-5DP	c07	N72-11149	US-PATENT-CLASS-343-113B	c09	N73-32110
US-PATENT-CLASS-343-5DP	c09	N73-12211	US-PATENT-CLASS-343-117	c07	N71-27056
US-PATENT-CLASS-343-5DP	c32	N77-32342	US-PATENT-CLASS-343-176	c07	N71-27056
US-PATENT-CLASS-343-5GC	c32	N75-24982	US-PATENT-CLASS-343-176	c32	N76-14321
US-PATENT-CLASS-343-5MH	c32	N77-21267	US-PATENT-CLASS-343-179	c07	N72-11149
US-PATENT-CLASS-343-6	c30	N71-16090	US-PATENT-CLASS-343-179	c07	N73-20174
US-PATENT-CLASS-343-6.BR	c32	N77-20289	US-PATENT-CLASS-343-200	c07	N73-16121
US-PATENT-CLASS-343-6.5	c21	N71-11766	US-PATENT-CLASS-343-204	c07	N73-26118
US-PATENT-CLASS-343-6.5	c10	N71-23099	US-PATENT-CLASS-343-703	c09	N71-13521
US-PATENT-CLASS-343-6.5R	c07	N72-12080	US-PATENT-CLASS-343-703	c07	N71-24614
US-PATENT-CLASS-343-6.5R	c07	N72-21118	US-PATENT-CLASS-343-705	c07	N70-38200
US-PATENT-CLASS-343-6.5R	c07	N72-25171	US-PATENT-CLASS-343-705	c07	N70-40202
US-PATENT-CLASS-343-6.5R	c08	N72-25209	US-PATENT-CLASS-343-705	c31	N71-10747
US-PATENT-CLASS-343-6.5R	c07	N73-25161	US-PATENT-CLASS-343-705	c03	N76-32140
US-PATENT-CLASS-343-6.5R	c21	N73-30641	US-PATENT-CLASS-343-706	c07	N72-21117
US-PATENT-CLASS-343-6.5R	c32	N74-12912	US-PATENT-CLASS-343-708	c09	N71-22888
US-PATENT-CLASS-343-6.5R	c32	N75-15854	US-PATENT-CLASS-343-708	c07	N71-22984
US-PATENT-CLASS-343-6.5R	c03	N75-30132	US-PATENT-CLASS-343-708	c07	N71-28980
US-PATENT-CLASS-343-6.5R	c32	N77-20289	US-PATENT-CLASS-343-708	c09	N72-25247
US-PATENT-CLASS-343-6.5SS	c32	N74-12912	US-PATENT-CLASS-343-708	c32	N74-20864
US-PATENT-CLASS-343-6.8R	c07	N72-12080	US-PATENT-CLASS-343-718	c09	N71-18720
US-PATENT-CLASS-343-6.8R	c07	N73-25161	US-PATENT-CLASS-343-720	c09	N72-12136
US-PATENT-CLASS-343-6.8R	c14	N73-25461	US-PATENT-CLASS-343-725	c07	N73-28013
US-PATENT-CLASS-343-7.4	c10	N72-22235	US-PATENT-CLASS-343-729	c07	N73-28013
US-PATENT-CLASS-343-7.5	c07	N69-39974	US-PATENT-CLASS-343-730	c32	N74-20863
US-PATENT-CLASS-343-7.5	c09	N71-24595	US-PATENT-CLASS-343-754	c09	N73-19234
US-PATENT-CLASS-343-7.5	c07	N72-11149	US-PATENT-CLASS-343-755	c33	N76-27472
US-PATENT-CLASS-343-7.5	c44	N74-19870	US-PATENT-CLASS-343-761	c33	N75-19516
US-PATENT-CLASS-343-9	c32	N75-15854	US-PATENT-CLASS-343-761	c32	N76-21365
US-PATENT-CLASS-343-10	c32	N77-32342	US-PATENT-CLASS-343-762	c07	N72-25174
US-PATENT-CLASS-343-11R	c09	N73-12211	US-PATENT-CLASS-343-768	c10	N71-26142
US-PATENT-CLASS-343-11VB	c09	N73-12211	US-PATENT-CLASS-343-769	c32	N74-20864
US-PATENT-CLASS-343-12	c21	N70-41930	US-PATENT-CLASS-343-770	c09	N72-31235
US-PATENT-CLASS-343-12	c10	N72-20224	US-PATENT-CLASS-343-770	c33	N76-18372
US-PATENT-CLASS-343-12R	c08	N72-25209	US-PATENT-CLASS-343-771	c07	N71-28809
US-PATENT-CLASS-343-13	c09	N71-18598	US-PATENT-CLASS-343-771	c07	N72-11148
US-PATENT-CLASS-343-14	c07	N70-41680	US-PATENT-CLASS-343-771	c09	N72-21244
US-PATENT-CLASS-343-14	c08	N72-25209	US-PATENT-CLASS-343-771	c07	N72-22127
US-PATENT-CLASS-343-14	c14	N73-25461	US-PATENT-CLASS-343-771	c09	N72-25247
US-PATENT-CLASS-343-16	c09	N71-20864	US-PATENT-CLASS-343-771	c09	N72-31235
US-PATENT-CLASS-343-16	c10	N71-21483	US-PATENT-CLASS-343-772	c07	N72-20141
US-PATENT-CLASS-343-16M	c10	N72-22235	US-PATENT-CLASS-343-773	c07	N72-20141
US-PATENT-CLASS-343-17.2	c07	N70-36911	US-PATENT-CLASS-343-776	c07	N71-12396
US-PATENT-CLASS-343-17.5	c14	N73-25461	US-PATENT-CLASS-343-777	c07	N71-27233
US-PATENT-CLASS-343-17.5	c32	N75-15854	US-PATENT-CLASS-343-777	c07	N72-25174
US-PATENT-CLASS-343-17.7	c07	N71-12391	US-PATENT-CLASS-343-779	c07	N71-11285
US-PATENT-CLASS-343-17.7	c44	N74-19870	US-PATENT-CLASS-343-779	c10	N72-22235
US-PATENT-CLASS-343-17.7	c32	N77-31350	US-PATENT-CLASS-343-779	c07	N72-25174
US-PATENT-CLASS-343-18	c31	N70-37981	US-PATENT-CLASS-343-779	c32	N76-15329
US-PATENT-CLASS-343-18	c07	N70-40063	US-PATENT-CLASS-343-779	c33	N76-27472
US-PATENT-CLASS-343-18	c30	N70-40309	US-PATENT-CLASS-343-781	c09	N70-35219
US-PATENT-CLASS-343-18	c07	N70-41678	US-PATENT-CLASS-343-781	c09	N70-35382
US-PATENT-CLASS-343-18B	c32	N74-12912	US-PATENT-CLASS-343-781	c09	N70-35425
US-PATENT-CLASS-343-18B	c32	N77-21267	US-PATENT-CLASS-343-781	c07	N72-32169
US-PATENT-CLASS-343-100	c10	N71-18722	US-PATENT-CLASS-343-781	c32	N74-11000
US-PATENT-CLASS-343-100	c07	N71-19854	US-PATENT-CLASS-343-781	c33	N75-19516
US-PATENT-CLASS-343-100	c30	N71-23723	US-PATENT-CLASS-343-781	c32	N76-21365
US-PATENT-CLASS-343-100	c07	N71-24621	US-PATENT-CLASS-343-782	c07	N73-14130
US-PATENT-CLASS-343-100	c09	N71-24804	US-PATENT-CLASS-343-784	c07	N71-28980
US-PATENT-CLASS-343-100	c31	N71-24813	US-PATENT-CLASS-343-786	c07	N71-15907
US-PATENT-CLASS-343-100	c07	N71-27056	US-PATENT-CLASS-343-786	c07	N71-22750
US-PATENT-CLASS-343-100	c07	N71-28900	US-PATENT-CLASS-343-786	c07	N71-26101
US-PATENT-CLASS-343-100CL	c32	N77-32342	US-PATENT-CLASS-343-786	c07	N71-27233
US-PATENT-CLASS-343-100HB	c14	N72-28437	US-PATENT-CLASS-343-786	c07	N72-20141
US-PATENT-CLASS-343-100HB	c14	N73-26432	US-PATENT-CLASS-343-786	c10	N72-22235
US-PATENT-CLASS-343-100PB	c32	N75-24982	US-PATENT-CLASS-343-786	c07	N72-25174
US-PATENT-CLASS-343-100R	c10	N73-16206	US-PATENT-CLASS-343-786	c09	N72-31235
US-PATENT-CLASS-343-100SA	c10	N73-16206	US-PATENT-CLASS-343-786	c32	N74-20863
US-PATENT-CLASS-343-100SA	c33	N74-20860	US-PATENT-CLASS-343-786	c32	N76-15330
US-PATENT-CLASS-343-100SA	c17	N76-21250	US-PATENT-CLASS-343-786	c32	N76-21365
US-PATENT-CLASS-343-100ST	c07	N72-21118	US-PATENT-CLASS-343-797	c09	N71-24842
US-PATENT-CLASS-343-100ST	c33	N74-20860	US-PATENT-CLASS-343-797	c07	N72-22127
US-PATENT-CLASS-343-100ST	c32	N75-15854	US-PATENT-CLASS-343-797	c09	N72-31235

NUMBER INDEX

US-PATENT-CLASS-343-797	c07	N73-28013	US-PATENT-CLASS-350-6	c14	N69-27461
US-PATENT-CLASS-343-797	c32	N74-20863	US-PATENT-CLASS-350-6	c36	N74-15145
US-PATENT-CLASS-343-797	c33	N76-14372	US-PATENT-CLASS-350-7	c74	N74-15095
US-PATENT-CLASS-343-799	c07	N71-27233	US-PATENT-CLASS-350-16	c14	N72-22444
US-PATENT-CLASS-343-803	c07	N73-28013	US-PATENT-CLASS-350-19	c14	N72-22441
US-PATENT-CLASS-343-823	c07	N71-28979	US-PATENT-CLASS-350-23	c14	N72-22441
US-PATENT-CLASS-343-833	c31	N70-34135	US-PATENT-CLASS-350-26	c14	N72-22441
US-PATENT-CLASS-343-837	c07	N72-32169	US-PATENT-CLASS-350-35	c14	N72-22441
US-PATENT-CLASS-343-837	c07	N73-14130	US-PATENT-CLASS-350-36	c14	N72-22441
US-PATENT-CLASS-343-837	c33	N75-19516	US-PATENT-CLASS-350-49	c14	N72-22441
US-PATENT-CLASS-343-837	c32	N76-15329	US-PATENT-CLASS-350-52	c14	N72-22441
US-PATENT-CLASS-343-837	c32	N76-18295	US-PATENT-CLASS-350-52	c14	N72-22444
US-PATENT-CLASS-343-839	c09	N73-19234	US-PATENT-CLASS-350-55	c23	N71-33229
US-PATENT-CLASS-343-840	c07	N71-27233	US-PATENT-CLASS-350-55	c14	N73-30393
US-PATENT-CLASS-343-840	c09	N72-12136	US-PATENT-CLASS-350-55	c23	N73-30666
US-PATENT-CLASS-343-840	c07	N72-32169	US-PATENT-CLASS-350-58	c14	N71-15604
US-PATENT-CLASS-343-840	c32	N76-18295	US-PATENT-CLASS-350-79	c14	N72-32452
US-PATENT-CLASS-343-846	c33	N76-14372	US-PATENT-CLASS-350-86	c14	N72-22445
US-PATENT-CLASS-343-853	c07	N72-11148	US-PATENT-CLASS-350-96	c07	N71-26291
US-PATENT-CLASS-343-853	c07	N72-22127	US-PATENT-CLASS-350-96R	c60	N77-14751
US-PATENT-CLASS-343-853	c07	N72-25174	US-PATENT-CLASS-350-96R	c60	N77-32731
US-PATENT-CLASS-343-853	c09	N72-31235	US-PATENT-CLASS-350-96WG	c36	N75-31427
US-PATENT-CLASS-343-853	c10	N73-16206	US-PATENT-CLASS-350-96WG	c36	N76-18428
US-PATENT-CLASS-343-853	c32	N74-20863	US-PATENT-CLASS-350-96WG	c36	N76-24553
US-PATENT-CLASS-343-853	c32	N74-20864	US-PATENT-CLASS-350-100	c36	N77-25501
US-PATENT-CLASS-343-854	c67	N69-27460	US-PATENT-CLASS-350-102	c23	N71-29123
US-PATENT-CLASS-343-854	c07	N71-27233	US-PATENT-CLASS-350-102	c36	N77-25501
US-PATENT-CLASS-343-854	c09	N73-19234	US-PATENT-CLASS-350-138	c23	N72-27728
US-PATENT-CLASS-343-854	c33	N74-20860	US-PATENT-CLASS-350-145	c74	N77-20882
US-PATENT-CLASS-343-854	c33	N76-27472	US-PATENT-CLASS-350-147	c14	N72-27409
US-PATENT-CLASS-343-872	c07	N71-28980	US-PATENT-CLASS-350-150	c26	N72-25680
US-PATENT-CLASS-343-873	c07	N71-19493	US-PATENT-CLASS-350-150	c36	N76-18427
US-PATENT-CLASS-343-873	c09	N72-25247	US-PATENT-CLASS-350-151	c36	N74-13205
US-PATENT-CLASS-343-876	c32	N76-15329	US-PATENT-CLASS-350-160	c36	N76-18427
US-PATENT-CLASS-343-880	c07	N73-26117	US-PATENT-CLASS-350-160R	c14	N72-25410
US-PATENT-CLASS-343-882	c33	N76-32457	US-PATENT-CLASS-350-160R	c26	N72-25680
US-PATENT-CLASS-343-883	c07	N73-26117	US-PATENT-CLASS-350-161	c26	N72-27784
US-PATENT-CLASS-343-884	c07	N71-27191	US-PATENT-CLASS-350-161	c36	N75-31427
US-PATENT-CLASS-343-889	c07	N73-26117	US-PATENT-CLASS-350-162	c14	N72-17323
US-PATENT-CLASS-343-893	c09	N72-21244	US-PATENT-CLASS-350-162SF	c23	N73-30666
US-PATENT-CLASS-343-893	c07	N73-28013	US-PATENT-CLASS-350-162SF	c74	N76-31998
US-PATENT-CLASS-343-895	c09	N73-19234	US-PATENT-CLASS-350-162SF	c74	N77-28932
US-PATENT-CLASS-343-895	c07	N73-26117	US-PATENT-CLASS-350-162SF	c36	N77-32478
US-PATENT-CLASS-343-909	c32	N74-11000	US-PATENT-CLASS-350-171	c23	N72-23695
US-PATENT-CLASS-343-909	c35	N76-15435	US-PATENT-CLASS-350-174	c74	N77-20882
US-PATENT-CLASS-343-912	c07	N72-21117	US-PATENT-CLASS-350-175FS	c14	N72-25414
US-PATENT-CLASS-343-912	c07	N72-22127	US-PATENT-CLASS-350-189	c23	N71-24857
US-PATENT-CLASS-343-912	c32	N76-18295	US-PATENT-CLASS-350-199	c14	N73-30393
US-PATENT-CLASS-343-915	c31	N71-16102	US-PATENT-CLASS-350-202	c23	N73-20741
US-PATENT-CLASS-343-915	c09	N71-20658	US-PATENT-CLASS-350-202	c74	N77-28932
US-PATENT-CLASS-343-915	c07	N72-32169	US-PATENT-CLASS-350-203	c14	N72-25409
US-PATENT-CLASS-343-915	c07	N73-14130	US-PATENT-CLASS-350-204	c14	N73-30393
US-PATENT-CLASS-343-915	c07	N73-24176	US-PATENT-CLASS-350-211	c44	N76-14602
US-PATENT-CLASS-343-915	c32	N76-18295	US-PATENT-CLASS-350-213	c14	N71-15622
US-PATENT-CLASS-343-915	c33	N76-32457	US-PATENT-CLASS-350-236	c74	N74-15095
US-PATENT-CLASS-346-1	c12	N71-20815	US-PATENT-CLASS-350-253	c35	N77-27366
US-PATENT-CLASS-346-1	c09	N72-21246	US-PATENT-CLASS-350-269	c33	N74-20861
US-PATENT-CLASS-346-23	c14	N72-18411	US-PATENT-CLASS-350-270	c70	N74-21300
US-PATENT-CLASS-346-24	c35	N74-15831	US-PATENT-CLASS-350-275	c09	N71-19479
US-PATENT-CLASS-346-29	c09	N72-12146	US-PATENT-CLASS-350-285	c14	N71-15605
US-PATENT-CLASS-346-33R	c35	N74-32877	US-PATENT-CLASS-350-285	c14	N71-17662
US-PATENT-CLASS-346-44	c09	N69-21467	US-PATENT-CLASS-350-285	c19	N71-26674
US-PATENT-CLASS-346-50	c14	N71-21006	US-PATENT-CLASS-350-285	c15	N72-11386
US-PATENT-CLASS-346-74HD	c21	N73-13644	US-PATENT-CLASS-350-285	c16	N73-33397
US-PATENT-CLASS-346-107	c23	N71-23976	US-PATENT-CLASS-350-285	c74	N74-15095
US-PATENT-CLASS-346-107A	c14	N72-18411	US-PATENT-CLASS-350-286	c07	N71-29065
US-PATENT-CLASS-346-108	c35	N74-15831	US-PATENT-CLASS-350-287	c15	N72-11386
US-PATENT-CLASS-346-110	c14	N73-32322	US-PATENT-CLASS-350-288	c23	N71-29123
US-PATENT-CLASS-346-138	c21	N73-13644	US-PATENT-CLASS-350-288	c12	N76-15189
US-PATENT-CLASS-346-138	c35	N74-15831	US-PATENT-CLASS-350-288	c74	N77-28933
US-PATENT-CLASS-346R	c73	N77-18891	US-PATENT-CLASS-350-292	c35	N75-12273
US-PATENT-CLASS-350-1	c23	N69-24332	US-PATENT-CLASS-350-293	c16	N73-16536
US-PATENT-CLASS-350-1	c67	N71-29065	US-PATENT-CLASS-350-293	c12	N76-15189
US-PATENT-CLASS-350-1	c16	N72-12440	US-PATENT-CLASS-350-293	c44	N76-24696
US-PATENT-CLASS-350-1	c24	N76-24363	US-PATENT-CLASS-350-295	c44	N77-32583
US-PATENT-CLASS-350-2	c23	N71-30027	US-PATENT-CLASS-350-299	c74	N74-21304
US-PATENT-CLASS-350-3.5	c16	N71-15551	US-PATENT-CLASS-350-299	c44	N76-24696
US-PATENT-CLASS-350-3.5	c16	N71-15565	US-PATENT-CLASS-350-299	c74	N77-28932
US-PATENT-CLASS-350-3.5	c16	N71-15567	US-PATENT-CLASS-350-310	c11	N69-24321
US-PATENT-CLASS-350-3.5	c16	N71-26154	US-PATENT-CLASS-350-310	c23	N71-24868
US-PATENT-CLASS-350-3.5	c16	N71-29131	US-PATENT-CLASS-350-310	c23	N71-29123
US-PATENT-CLASS-350-3.5	c14	N72-17324	US-PATENT-CLASS-350-310	c23	N71-33229
US-PATENT-CLASS-350-3.5	c16	N73-30476	US-PATENT-CLASS-350-310	c23	N72-22673
US-PATENT-CLASS-350-3.5	c35	N74-15146	US-PATENT-CLASS-350-310	c74	N77-28933
US-PATENT-CLASS-350-3.5	c35	N74-17153	US-PATENT-CLASS-350-311	c74	N75-25706
US-PATENT-CLASS-350-3.5	c35	N74-26946	US-PATENT-CLASS-350-312	c16	N72-12440
US-PATENT-CLASS-350-3.5	c35	N75-25124	US-PATENT-CLASS-350-320	c74	N77-28933
US-PATENT-CLASS-350-3.5	c35	N75-27328	US-PATENT-CLASS-350-320	c44	N77-32583
US-PATENT-CLASS-350-3.5	c35	N76-18402	US-PATENT-CLASS-351-23	c05	N73-26072

NUMBER INDEX

US-PATENT-CLASS-351-23	c52	N76-30793	US-PATENT-CLASS-356-152	c15	N71-28740
US-PATENT-CLASS-351-30	c05	N73-26072	US-PATENT-CLASS-356-152	c16	N72-13437
US-PATENT-CLASS-351-30	c52	N76-30793	US-PATENT-CLASS-356-152	c14	N72-20379
US-PATENT-CLASS-351-36	c05	N73-26072	US-PATENT-CLASS-356-152	c14	N72-27409
US-PATENT-CLASS-351-36	c52	N76-30793	US-PATENT-CLASS-356-152	c14	N73-25462
US-PATENT-CLASS-351-38	c54	N75-27759	US-PATENT-CLASS-356-152	c36	N74-15145
US-PATENT-CLASS-352-84	c16	N71-33410	US-PATENT-CLASS-356-152	c36	N74-21091
US-PATENT-CLASS-352-84	c14	N72-18411	US-PATENT-CLASS-356-152	c74	N74-21304
US-PATENT-CLASS-352-169	c14	N73-14427	US-PATENT-CLASS-356-152	c74	N77-22951
US-PATENT-CLASS-353-54	c34	N74-23066	US-PATENT-CLASS-356-153	c15	N71-28740
US-PATENT-CLASS-353-61	c34	N74-23066	US-PATENT-CLASS-356-153	c23	N71-29125
US-PATENT-CLASS-354-234	c33	N74-20861	US-PATENT-CLASS-356-153	c16	N73-33397
US-PATENT-CLASS-354-234	c70	N74-21300	US-PATENT-CLASS-356-153	c18	N76-14186
US-PATENT-CLASS-355-18	c14	N73-33361	US-PATENT-CLASS-356-154	c15	N71-26673
US-PATENT-CLASS-356-4	c14	N72-17326	US-PATENT-CLASS-356-161	c26	N73-26751
US-PATENT-CLASS-356-4	c07	N73-26119	US-PATENT-CLASS-356-162	c66	N76-19888
US-PATENT-CLASS-356-4	c36	N74-15145	US-PATENT-CLASS-356-166	c14	N71-23175
US-PATENT-CLASS-356-4	c35	N75-15014	US-PATENT-CLASS-356-167	c14	N72-11364
US-PATENT-CLASS-356-5	c07	N73-26119	US-PATENT-CLASS-356-167	c66	N76-19888
US-PATENT-CLASS-356-5	c36	N74-15145	US-PATENT-CLASS-356-171	c74	N77-22950
US-PATENT-CLASS-356-5	c36	N75-15028	US-PATENT-CLASS-356-172	c16	N73-33397
US-PATENT-CLASS-356-17	c14	N72-21409	US-PATENT-CLASS-356-172	c36	N74-21091
US-PATENT-CLASS-356-18	c14	N72-21409	US-PATENT-CLASS-356-172	c74	N77-22951
US-PATENT-CLASS-356-28	c21	N71-19212	US-PATENT-CLASS-356-180	c35	N74-27860
US-PATENT-CLASS-356-28	c16	N71-24828	US-PATENT-CLASS-356-186	c35	N75-19613
US-PATENT-CLASS-356-28	c72	N74-19310	US-PATENT-CLASS-356-189	c35	N75-19613
US-PATENT-CLASS-356-28	c36	N75-15028	US-PATENT-CLASS-356-197	c37	N74-18123
US-PATENT-CLASS-356-28	c35	N75-16783	US-PATENT-CLASS-356-201	c75	N74-30156
US-PATENT-CLASS-356-28	c36	N76-14447	US-PATENT-CLASS-356-201	c35	N77-14411
US-PATENT-CLASS-356-28	c36	N77-25501	US-PATENT-CLASS-356-202	c26	N73-26751
US-PATENT-CLASS-356-32	c14	N72-11364	US-PATENT-CLASS-356-203	c14	N71-26788
US-PATENT-CLASS-356-32	c32	N73-20740	US-PATENT-CLASS-356-204	c35	N77-14411
US-PATENT-CLASS-356-36	c23	N71-16365	US-PATENT-CLASS-356-207	c45	N76-17656
US-PATENT-CLASS-356-37	c45	N76-21742	US-PATENT-CLASS-356-209	c23	N71-16341
US-PATENT-CLASS-356-43	c74	N74-15095	US-PATENT-CLASS-356-209	c14	N71-28993
US-PATENT-CLASS-356-43	c75	N74-30156	US-PATENT-CLASS-356-209	c14	N72-17323
US-PATENT-CLASS-356-51	c06	N72-31141	US-PATENT-CLASS-356-209	c35	N76-31490
US-PATENT-CLASS-356-51	c35	N75-30502	US-PATENT-CLASS-356-212	c35	N77-31465
US-PATENT-CLASS-356-71	c66	N76-19888	US-PATENT-CLASS-356-216	c74	N74-15095
US-PATENT-CLASS-356-72	c14	N71-23268	US-PATENT-CLASS-356-222	c03	N72-20033
US-PATENT-CLASS-356-72	c33	N73-27796	US-PATENT-CLASS-356-236	c74	N77-21941
US-PATENT-CLASS-356-73	c75	N74-30156	US-PATENT-CLASS-356-237	c74	N77-10899
US-PATENT-CLASS-356-74	c30	N71-15990	US-PATENT-CLASS-356-239	c74	N77-10899
US-PATENT-CLASS-356-76	c23	N71-26206	US-PATENT-CLASS-356-241	c14	N72-32452
US-PATENT-CLASS-356-76	c14	N71-29041	US-PATENT-CLASS-356-244	c14	N72-17323
US-PATENT-CLASS-356-83	c35	N75-19613	US-PATENT-CLASS-356-244	c35	N76-31490
US-PATENT-CLASS-356-85	c37	N74-18123	US-PATENT-CLASS-356-246	c35	N74-27860
US-PATENT-CLASS-356-85	c75	N74-30156	US-PATENT-CLASS-356-248	c14	N72-22444
US-PATENT-CLASS-356-87	c75	N74-30156	US-PATENT-CLASS-356-1065	c35	N74-23040
US-PATENT-CLASS-356-96	c35	N75-19613	US-PATENT-CLASS-357-5	c33	N75-31332
US-PATENT-CLASS-356-97	c35	N77-14411	US-PATENT-CLASS-357-7	c33	N75-31331
US-PATENT-CLASS-356-103	c14	N71-28994	US-PATENT-CLASS-357-23	c76	N75-25730
US-PATENT-CLASS-356-103	c36	N75-15028	US-PATENT-CLASS-357-24	c33	N75-31331
US-PATENT-CLASS-356-104	c16	N71-24074	US-PATENT-CLASS-357-29	c76	N75-25730
US-PATENT-CLASS-356-106	c14	N71-17627	US-PATENT-CLASS-357-30	c44	N76-28635
US-PATENT-CLASS-356-106	c14	N71-17655	US-PATENT-CLASS-357-42	c76	N75-25730
US-PATENT-CLASS-356-106	c14	N71-27215	US-PATENT-CLASS-357-52	c76	N75-25730
US-PATENT-CLASS-356-106	c14	N73-12446	US-PATENT-CLASS-357-54	c76	N75-25730
US-PATENT-CLASS-356-106	c35	N74-15146	US-PATENT-CLASS-357-59	c44	N76-28635
US-PATENT-CLASS-356-106LE	c36	N75-19653	US-PATENT-CLASS-357-63	c33	N76-31409
US-PATENT-CLASS-356-106R	c72	N74-19310	US-PATENT-CLASS-357-91	c76	N75-25730
US-PATENT-CLASS-356-106R	c36	N76-14447	US-PATENT-CLASS-358-36	c32	N75-21485
US-PATENT-CLASS-356-106R	c35	N77-10493	US-PATENT-CLASS-358-44	c74	N77-18893
US-PATENT-CLASS-356-106R	c47	N77-10753	US-PATENT-CLASS-358-133	c32	N77-24328
US-PATENT-CLASS-356-106S	c23	N73-13661	US-PATENT-CLASS-358-138	c32	N77-24328
US-PATENT-CLASS-356-106S	c35	N76-31490	US-PATENT-CLASS-360-9	c35	N76-16391
US-PATENT-CLASS-356-107	c16	N71-24170	US-PATENT-CLASS-360-10	c35	N76-16391
US-PATENT-CLASS-356-108	c26	N73-26751	US-PATENT-CLASS-360-25	c35	N77-17426
US-PATENT-CLASS-356-108	c16	N73-30476	US-PATENT-CLASS-360-26	c33	N76-18353
US-PATENT-CLASS-356-109	c16	N73-30476	US-PATENT-CLASS-360-31	c35	N77-17426
US-PATENT-CLASS-356-110	c14	N73-25463	US-PATENT-CLASS-360-35	c35	N76-16391
US-PATENT-CLASS-356-112	c72	N74-19310	US-PATENT-CLASS-360-51	c33	N76-18353
US-PATENT-CLASS-356-113	c14	N72-17323	US-PATENT-CLASS-360-101	c35	N76-16391
US-PATENT-CLASS-356-113	c35	N74-23040	US-PATENT-CLASS-363-53	c33	N77-30365
US-PATENT-CLASS-356-114	c14	N73-12446	US-PATENT-CLASS-363-70	c33	N77-30365
US-PATENT-CLASS-356-114	c35	N76-31490	US-PATENT-CLASS-403-28	c27	N76-14264
US-PATENT-CLASS-356-117	c23	N71-16101	US-PATENT-CLASS-403-179	c27	N76-14264
US-PATENT-CLASS-356-123	c74	N76-19935	US-PATENT-CLASS-403-273	c37	N77-23482
US-PATENT-CLASS-356-124	c74	N76-19935	US-PATENT-CLASS-408-80	c37	N74-25968
US-PATENT-CLASS-356-138	c14	N72-20379	US-PATENT-CLASS-408-111	c37	N74-25968
US-PATENT-CLASS-356-138	c16	N73-33397	US-PATENT-CLASS-408-112	c37	N75-25186
US-PATENT-CLASS-356-141	c14	N72-27409	US-PATENT-CLASS-408-137	c15	N71-33518
US-PATENT-CLASS-356-141	c14	N73-28490	US-PATENT-CLASS-408-186	c37	N75-25186
US-PATENT-CLASS-356-141	c36	N74-21091	US-PATENT-CLASS-408-186	c37	N77-22478
US-PATENT-CLASS-356-141	c89	N74-30886	US-PATENT-CLASS-408-193	c37	N75-25186
US-PATENT-CLASS-356-141	c74	N77-22951	US-PATENT-CLASS-408-193	c37	N77-22478
US-PATENT-CLASS-356-147	c89	N74-30886	US-PATENT-CLASS-408-195	c37	N75-25186
US-PATENT-CLASS-356-148	c16	N73-33397	US-PATENT-CLASS-408-225	c37	N77-22478
US-PATENT-CLASS-356-150	c15	N71-28740	US-PATENT-CLASS-415-145	c07	N77-28118

NUMBER INDEX

US-PATENT-CLASS-415-180	c07	N77-23106	US-PATENT-CLASS-427-287	c27	N76-16229
US-PATENT-CLASS-415-181	c07	N74-28226	US-PATENT-CLASS-427-322	c34	N77-18382
US-PATENT-CLASS-415-181	c07	N74-31270	US-PATENT-CLASS-427-376	c27	N76-22377
US-PATENT-CLASS-416-25	c05	N75-12930	US-PATENT-CLASS-427-376	c27	N76-23426
US-PATENT-CLASS-416-104	c05	N77-17029	US-PATENT-CLASS-427-379	c27	N76-22377
US-PATENT-CLASS-416-115	c02	N72-11018	US-PATENT-CLASS-427-379	c27	N76-23426
US-PATENT-CLASS-416-121	c02	N72-11018	US-PATENT-CLASS-427-380	c27	N76-22377
US-PATENT-CLASS-416-127	c02	N72-11018	US-PATENT-CLASS-427-380	c27	N76-23426
US-PATENT-CLASS-416-130	c02	N72-11018	US-PATENT-CLASS-427-402	c27	N76-22377
US-PATENT-CLASS-416-135	c07	N77-32148	US-PATENT-CLASS-427-402	c27	N76-23426
US-PATENT-CLASS-416-138	c05	N77-17029	US-PATENT-CLASS-427-426	c27	N76-15310
US-PATENT-CLASS-416-141	c05	N77-17029	US-PATENT-CLASS-428-35	c34	N77-18382
US-PATENT-CLASS-416-149	c02	N72-11018	US-PATENT-CLASS-428-77	c27	N76-14264
US-PATENT-CLASS-416-153	c17	N77-14025	US-PATENT-CLASS-428-109	c27	N76-14264
US-PATENT-CLASS-416-160	c07	N77-14025	US-PATENT-CLASS-428-117	c37	N76-24575
US-PATENT-CLASS-416-162	c07	N77-14025	US-PATENT-CLASS-428-141	c24	N77-28225
US-PATENT-CLASS-416-165	c07	N77-14025	US-PATENT-CLASS-428-161	c24	N77-28225
US-PATENT-CLASS-416-167	c07	N77-14025	US-PATENT-CLASS-428-212	c27	N76-14264
US-PATENT-CLASS-416-190	c07	N77-32148	US-PATENT-CLASS-428-214	c27	N76-14264
US-PATENT-CLASS-416-193A	c07	N77-32148	US-PATENT-CLASS-428-301	c24	N77-27188
US-PATENT-CLASS-416-200	c02	N72-11018	US-PATENT-CLASS-428-303	c27	N76-15310
US-PATENT-CLASS-416-220R	c07	N77-27116	US-PATENT-CLASS-428-328	c24	N77-27188
US-PATENT-CLASS-416-221	c07	N77-27116	US-PATENT-CLASS-428-332	c27	N76-22377
US-PATENT-CLASS-416-223	c07	N74-28226	US-PATENT-CLASS-428-332	c27	N76-23426
US-PATENT-CLASS-416-224	c24	N77-19170	US-PATENT-CLASS-428-368	c24	N77-27188
US-PATENT-CLASS-416-230	c24	N77-19170	US-PATENT-CLASS-428-412	c27	N76-16230
US-PATENT-CLASS-416-237	c07	N74-28226	US-PATENT-CLASS-428-413	c27	N76-16230
US-PATENT-CLASS-416-241A	c07	N77-32148	US-PATENT-CLASS-428-416	c27	N76-14264
US-PATENT-CLASS-417-36	c35	N75-19611	US-PATENT-CLASS-428-418	c24	N77-27188
US-PATENT-CLASS-417-50	c15	N71-27084	US-PATENT-CLASS-428-421	c34	N77-18382
US-PATENT-CLASS-417-52	c37	N74-27904	US-PATENT-CLASS-428-425	c24	N77-28225
US-PATENT-CLASS-417-138	c35	N75-19611	US-PATENT-CLASS-428-428	c27	N76-22377
US-PATENT-CLASS-417-141	c44	N76-29701	US-PATENT-CLASS-428-428	c27	N76-23426
US-PATENT-CLASS-417-152	c15	N72-22489	US-PATENT-CLASS-428-447	c27	N76-14264
US-PATENT-CLASS-417-207	c44	N76-29701	US-PATENT-CLASS-428-447	c27	N76-16230
US-PATENT-CLASS-417-209	c34	N76-17317	US-PATENT-CLASS-428-450	c27	N76-16229
US-PATENT-CLASS-417-209	c44	N76-29701	US-PATENT-CLASS-428-450	c27	N76-22377
US-PATENT-CLASS-417-379	c44	N76-29701	US-PATENT-CLASS-428-450	c27	N76-23426
US-PATENT-CLASS-417-351	c15	N73-24513	US-PATENT-CLASS-428-457	c27	N76-16229
US-PATENT-CLASS-417-355	c35	N75-19611	US-PATENT-CLASS-428-457	c24	N77-27188
US-PATENT-CLASS-417-470	c35	N74-15126	US-PATENT-CLASS-428-457	c24	N77-28225
US-PATENT-CLASS-417-471	c35	N74-15126	US-PATENT-CLASS-428-458	c24	N77-28225
US-PATENT-CLASS-423-231	c25	N74-12813	US-PATENT-CLASS-428-461	c34	N77-18382
US-PATENT-CLASS-423-249	c25	N76-27383	US-PATENT-CLASS-428-469	c27	N76-16229
US-PATENT-CLASS-423-345	c76	N76-25049	US-PATENT-CLASS-428-474	c34	N77-18382
US-PATENT-CLASS-423-346	c76	N76-25049	US-PATENT-CLASS-428-538	c27	N76-22377
US-PATENT-CLASS-423-352	c36	N76-18427	US-PATENT-CLASS-428-538	c27	N76-23426
US-PATENT-CLASS-423-407	c24	N76-14203	US-PATENT-CLASS-428-539	c27	N76-16229
US-PATENT-CLASS-423-446	c15	N73-19457	US-PATENT-CLASS-428-902	c24	N77-27188
US-PATENT-CLASS-423-579	c46	N74-13011	US-PATENT-CLASS-428-911	c27	N76-16230
US-PATENT-CLASS-423-625	c15	N73-19457	US-PATENT-CLASS-428-911	c24	N77-27188
US-PATENT-CLASS-423-644	c36	N76-18427	US-PATENT-CLASS-428-920	c27	N76-16230
US-PATENT-CLASS-423-648R	c44	N77-22607	US-PATENT-CLASS-428-920	c27	N76-22377
US-PATENT-CLASS-423-650	c44	N76-18642	US-PATENT-CLASS-428-920	c27	N76-23426
US-PATENT-CLASS-423-650	c44	N76-29700	US-PATENT-CLASS-428-921	c27	N76-16230
US-PATENT-CLASS-423-650	c44	N76-29704	US-PATENT-CLASS-429-23	c44	N77-14581
US-PATENT-CLASS-423-650	c44	N77-10636	US-PATENT-CLASS-429-34	c44	N77-14581
US-PATENT-CLASS-424-3	c51	N77-27677	US-PATENT-CLASS-429-105	c44	N77-22606
US-PATENT-CLASS-424-180	c52	N75-15270	US-PATENT-CLASS-429-107	c44	N77-22606
US-PATENT-CLASS-425-DIG. 43	c31	N75-13111	US-PATENT-CLASS-429-190	c44	N77-22606
US-PATENT-CLASS-425-28D	c31	N74-32917	US-PATENT-CLASS-431-4	c44	N76-29704
US-PATENT-CLASS-425-35	c31	N74-32917	US-PATENT-CLASS-431-9	c23	N73-30665
US-PATENT-CLASS-425-77	c15	N72-20446	US-PATENT-CLASS-431-11	c44	N77-10636
US-PATENT-CLASS-425-113	c15	N73-13464	US-PATENT-CLASS-431-41	c44	N77-10636
US-PATENT-CLASS-425-128	c31	N74-32920	US-PATENT-CLASS-431-116	c44	N77-10636
US-PATENT-CLASS-425-133	c15	N73-13464	US-PATENT-CLASS-431-162	c44	N77-10636
US-PATENT-CLASS-425-176	c15	N73-13464	US-PATENT-CLASS-431-163	c44	N76-29704
US-PATENT-CLASS-425-405R	c31	N75-13111	US-PATENT-CLASS-431-170	c44	N77-10636
US-PATENT-CLASS-425-415	c31	N74-32920	US-PATENT-CLASS-431-173	c23	N73-30665
US-PATENT-CLASS-425-438	c31	N75-13111	US-PATENT-CLASS-431-202	c25	N74-33378
US-PATENT-CLASS-425-468	c31	N75-13111	US-PATENT-CLASS-431-210	c44	N76-29704
US-PATENT-CLASS-427-4	c51	N77-27677	US-PATENT-CLASS-431-352	c28	N71-28915
US-PATENT-CLASS-427-47	c44	N77-32583	US-PATENT-CLASS-526-1	c27	N76-24405
US-PATENT-CLASS-427-86	c44	N76-28635	US-PATENT-CLASS-526-255	c27	N76-24405
US-PATENT-CLASS-427-113	c44	N76-28635	US-PATENT-CLASS-536-56	c27	N77-30236
US-PATENT-CLASS-427-130	c44	N77-32583	US-PATENT-CLASS-536-58	c27	N77-30236
US-PATENT-CLASS-427-160	c34	N77-18382	US-PATENT-CLASS-536-84	c27	N77-30236
US-PATENT-CLASS-427-162	c12	N76-15189	US-PATENT-CLASS-536-105	c27	N77-30236
US-PATENT-CLASS-427-196	c27	N76-15310	US-PATENT-CLASS-536-536-85	c27	N77-30236
US-PATENT-CLASS-427-203	c27	N76-16229	US-PATENT-CLASS-6554	c35	N77-24455
US-PATENT-CLASS-427-204	c27	N76-16229	US-PATENT-CLASS-6564	c35	N77-24455
US-PATENT-CLASS-427-205	c27	N76-16229			
US-PATENT-CLASS-427-230	c37	N76-31524	US-PATENT-DES-228,688	c05	N74-10907
US-PATENT-CLASS-427-248	c44	N76-28635			
US-PATENT-CLASS-427-249	c44	N76-28635	US-PATENT-RE-26,548	c07	N77-12389
US-PATENT-CLASS-427-250	c12	N76-15189	US-PATENT-RE-28,921	c52	N76-30793
US-PATENT-CLASS-427-250	c44	N76-28635			
US-PATENT-CLASS-427-270	c27	N76-16229	US-PATENT-2,837,706	c15	N71-28952
US-PATENT-CLASS-427-275	c27	N76-16229	US-PATENT-2,898,889	c02	N71-29128

NUMBER INDEX

US-PATENT-2,903,307	.....	c15 N71-29136	US-PATENT-3,128,389	.....	c09 N70-38604
US-PATENT-2,926,123	.....	c33 N71-29151	US-PATENT-3,128,845	.....	c15 N70-38601
US-PATENT-2,934,331	.....	c15 N70-33382	US-PATENT-3,130,940	.....	c33 N70-33344
US-PATENT-2,940,259	.....	c28 N70-33241	US-PATENT-3,132,342	.....	c07 N70-38200
US-PATENT-2,944,316	.....	c15 N71-16076	US-PATENT-3,132,476	.....	c28 N70-34294
US-PATENT-2,945,667	.....	c15 N70-33376	US-PATENT-3,132,479	.....	c15 N71-28951
US-PATENT-2,956,772	.....	c33 N71-29152	US-PATENT-3,132,903	.....	c15 N70-38620
US-PATENT-2,960,002	.....	c14 N70-41946	US-PATENT-3,135,089	.....	c28 N70-38504
US-PATENT-2,971,837	.....	c17 N70-33283	US-PATENT-3,135,090	.....	c28 N70-38505
US-PATENT-2,974,925	.....	c28 N70-33372	US-PATENT-3,136,123	.....	c28 N70-38199
US-PATENT-2,984,735	.....	c11 N70-33329	US-PATENT-3,137,082	.....	c09 N73-14215
US-PATENT-2,991,671	.....	c15 N70-33330	US-PATENT-3,138,837	.....	c17 N70-38198
US-PATENT-2,991,961	.....	c02 N70-33332	US-PATENT-3,139,725	.....	c28 N70-38645
US-PATENT-2,996,212	.....	c31 N71-17680	US-PATENT-3,140,728	.....	c15 N70-36908
US-PATENT-2,997,274	.....	c28 N71-29154	US-PATENT-3,141,340	.....	c11 N70-38196
US-PATENT-3,001,363	.....	c28 N70-33331	US-PATENT-3,141,769	.....	c28 N70-38197
US-PATENT-3,001,395	.....	c14 N70-33386	US-PATENT-3,141,932	.....	c03 N70-38713
US-PATENT-3,001,739	.....	c03 N70-33343	US-PATENT-3,143,321	.....	c15 N70-34850
US-PATENT-3,004,189	.....	c37 N75-29426	US-PATENT-3,143,651	.....	c14 N70-40240
US-PATENT-3,004,735	.....	c14 N70-33322	US-PATENT-3,144,219	.....	c31 N70-38676
US-PATENT-3,005,081	.....	c09 N70-33312	US-PATENT-3,144,999	.....	c02 N70-34856
US-PATENT-3,005,339	.....	c11 N70-33287	US-PATENT-3,145,874	.....	c11 N71-15960
US-PATENT-3,006,229	.....	c15 N70-33311	US-PATENT-3,147,422	.....	c09 N70-38712
US-PATENT-3,010,372	.....	c15 N70-33180	US-PATENT-3,149,897	.....	c09 N70-36494
US-PATENT-3,011,760	.....	c15 N70-33226	US-PATENT-3,150,329	.....	c09 N70-38995
US-PATENT-3,012,400	.....	c28 N70-33374	US-PATENT-3,150,367	.....	c03 N70-36778
US-PATENT-3,012,407	.....	c15 N70-33323	US-PATENT-3,152,344	.....	c05 N70-36493
US-PATENT-3,016,653	.....	c28 N70-33356	US-PATENT-3,156,090	.....	c28 N70-37245
US-PATENT-3,016,863	.....	c12 N70-33305	US-PATENT-3,157,529	.....	c18 N70-36400
US-PATENT-3,022,672	.....	c14 N70-34816	US-PATENT-3,158,172	.....	c15 N70-34817
US-PATENT-3,024,659	.....	c14 N70-34820	US-PATENT-3,158,336	.....	c31 N70-36410
US-PATENT-3,028,122	.....	c02 N70-33286	US-PATENT-3,158,764	.....	c03 N70-36803
US-PATENT-3,028,126	.....	c21 N70-33279	US-PATENT-3,159,967	.....	c28 N70-36802
US-PATENT-3,028,128	.....	c31 N70-33242	US-PATENT-3,160,567	.....	c14 N70-36808
US-PATENT-3,035,333	.....	c28 N70-41818	US-PATENT-3,160,825	.....	c14 N70-35220
US-PATENT-3,038,077	.....	c21 N70-33181	US-PATENT-3,160,950	.....	c15 N70-36409
US-PATENT-3,038,175	.....	c05 N70-33285	US-PATENT-3,162,012	.....	c15 N70-36411
US-PATENT-3,041,587	.....	c14 N70-33179	US-PATENT-3,163,935	.....	c14 N70-36907
US-PATENT-3,041,924	.....	c14 N70-33254	US-PATENT-3,164,222	.....	c15 N70-34861
US-PATENT-3,045,424	.....	c28 N70-40367	US-PATENT-3,164,369	.....	c15 N70-36412
US-PATENT-3,049,876	.....	c28 N70-33284	US-PATENT-3,165,356	.....	c05 N70-35152
US-PATENT-3,053,464	.....	c02 N70-33255	US-PATENT-3,166,834	.....	c15 N70-36901
US-PATENT-3,057,597	.....	c15 N70-33264	US-PATENT-3,167,426	.....	c17 N70-36616
US-PATENT-3,059,220	.....	c09 N70-33182	US-PATENT-3,168,827	.....	c14 N70-36807
US-PATENT-3,063,251	.....	c11 N70-33278	US-PATENT-3,169,001	.....	c02 N70-36825
US-PATENT-3,064,928	.....	c02 N70-33266	US-PATENT-3,169,613	.....	c15 N70-36947
US-PATENT-3,067,573	.....	c28 N70-39899	US-PATENT-3,169,725	.....	c31 N70-34296
US-PATENT-3,068,658	.....	c15 N70-34247	US-PATENT-3,170,286	.....	c15 N70-36535
US-PATENT-3,068,123	.....	c14 N70-39898	US-PATENT-3,170,290	.....	c28 N70-36910
US-PATENT-3,070,330	.....	c21 N70-34539	US-PATENT-3,170,295	.....	c27 N71-28929
US-PATENT-3,070,349	.....	c28 N70-39895	US-PATENT-3,170,324	.....	c14 N70-36824
US-PATENT-3,070,407	.....	c15 N70-39896	US-PATENT-3,170,471	.....	c32 N70-36536
US-PATENT-3,072,574	.....	c18 N70-39897	US-PATENT-3,170,486	.....	c15 N70-36492
US-PATENT-3,076,065	.....	c09 N70-39915	US-PATENT-3,170,605	.....	c15 N70-38996
US-PATENT-3,077,599	.....	c07 N70-40202	US-PATENT-3,170,657	.....	c02 N70-34858
US-PATENT-3,078,113	.....	c02 N70-38009	US-PATENT-3,170,660	.....	c02 N70-36804
US-PATENT-3,080,711	.....	c28 N70-38711	US-PATENT-3,170,773	.....	c17 N70-33288
US-PATENT-3,083,611	.....	c21 N70-35427	US-PATENT-3,171,060	.....	c25 N70-33267
US-PATENT-3,084,421	.....	c17 N70-38490	US-PATENT-3,171,081	.....	c14 N70-35666
US-PATENT-3,085,165	.....	c09 N70-34819	US-PATENT-3,172,097	.....	c08 N70-35423
US-PATENT-3,087,652	.....	c02 N70-34178	US-PATENT-3,173,246	.....	c28 N70-33265
US-PATENT-3,088,441	.....	c15 N70-35409	US-PATENT-3,173,251	.....	c28 N70-33375
US-PATENT-3,090,212	.....	c33 N70-37979	US-PATENT-3,174,278	.....	c25 N70-36946
US-PATENT-3,090,580	.....	c31 N70-37924	US-PATENT-3,174,279	.....	c28 N70-36806
US-PATENT-3,093,000	.....	c15 N70-37925	US-PATENT-3,174,827	.....	c26 N70-36805
US-PATENT-3,093,346	.....	c31 N70-37938	US-PATENT-3,175,789	.....	c31 N70-36654
US-PATENT-3,098,630	.....	c02 N70-37939	US-PATENT-3,176,222	.....	c14 N70-36618
US-PATENT-3,100,294	.....	c09 N70-38998	US-PATENT-3,176,499	.....	c14 N70-35368
US-PATENT-3,100,990	.....	c14 N70-34813	US-PATENT-3,176,933	.....	c33 N70-36617
US-PATENT-3,102,948	.....	c15 N70-34814	US-PATENT-3,177,933	.....	c33 N70-36847
US-PATENT-3,104,079	.....	c31 N70-37986	US-PATENT-3,178,883	.....	c21 N70-36938
US-PATENT-3,104,082	.....	c02 N70-38011	US-PATENT-3,180,264	.....	c33 N70-36846
US-PATENT-3,105,515	.....	c15 N70-38603	US-PATENT-3,180,587	.....	c21 N70-36943
US-PATENT-3,106,603	.....	c09 N70-38201	US-PATENT-3,181,821	.....	c31 N70-36845
US-PATENT-3,108,171	.....	c33 N70-34812	US-PATENT-3,182,496	.....	c11 N70-36913
US-PATENT-3,110,318	.....	c12 N70-38997	US-PATENT-3,183,506	.....	c07 N70-36911
US-PATENT-3,112,672	.....	c11 N70-38202	US-PATENT-3,184,915	.....	c22 N70-34248
US-PATENT-3,115,620	.....	c31 N70-37981	US-PATENT-3,185,023	.....	c14 N70-34298
US-PATENT-3,118,100	.....	c03 N71-29129	US-PATENT-3,187,583	.....	c11 N70-38675
US-PATENT-3,119,222	.....	c28 N70-37980	US-PATENT-3,188,472	.....	c21 N70-34297
US-PATENT-3,120,101	.....	c28 N70-34860	US-PATENT-3,188,844	.....	c15 N70-34249
US-PATENT-3,120,361	.....	c31 N70-38010	US-PATENT-3,189,299	.....	c21 N70-34295
US-PATENT-3,120,738	.....	c28 N70-38249	US-PATENT-3,189,535	.....	c15 N70-34967
US-PATENT-3,121,309	.....	c28 N70-35381	US-PATENT-3,189,726	.....	c33 N70-34545
US-PATENT-3,122,000	.....	c15 N70-38020	US-PATENT-3,189,784	.....	c33 N75-27250
US-PATENT-3,122,058	.....	c28 N70-38181	US-PATENT-3,189,794	.....	c09 N70-34502
US-PATENT-3,122,885	.....	c28 N70-38710	US-PATENT-3,189,864	.....	c09 N70-34596
US-PATENT-3,123,248	.....	c11 N70-38182	US-PATENT-3,191,316	.....	c31 N70-34966
US-PATENT-3,127,157	.....	c15 N70-38225	US-PATENT-3,191,379	.....	c27 N70-35534

NUMBER INDEX

US-PATENT-3, 191, 907	c15 N70-34859	US-PATENT-3, 238, 730	c03 N71-12260
US-PATENT-3, 192, 730	c06 N70-34946	US-PATENT-3, 238, 774	c14 N71-14996
US-PATENT-3, 193, 883	c27 N70-34783	US-PATENT-3, 238, 777	c14 N71-15598
US-PATENT-3, 193, 883	c20 N71-17143	US-PATENT-3, 239, 660	c23 N71-30292
US-PATENT-3, 194, 060	c14 N70-34794	US-PATENT-3, 242, 716	c14 N71-15992
US-PATENT-3, 194, 525	c11 N70-35383	US-PATENT-3, 243, 154	c23 N71-15673
US-PATENT-3, 194, 951	c08 N70-34778	US-PATENT-3, 243, 791	c07 N71-11298
US-PATENT-3, 196, 261	c08 N70-34787	US-PATENT-3, 244, 943	c15 N71-28516
US-PATENT-3, 196, 362	c09 N70-35440	US-PATENT-3, 249, 012	c03 N71-12258
US-PATENT-3, 196, 557	c11 N70-34815	US-PATENT-3, 249, 013	c03 N71-12259
US-PATENT-3, 196, 558	c14 N70-35394	US-PATENT-3, 251, 053	c08 N71-12501
US-PATENT-3, 196, 598	c28 N70-34788	US-PATENT-3, 252, 100	c10 N71-28960
US-PATENT-3, 196, 675	c14 N70-34818	US-PATENT-3, 254, 395	c28 N71-15658
US-PATENT-3, 196, 690	c11 N70-34786	US-PATENT-3, 254, 487	c28 N71-15659
US-PATENT-3, 197, 616	c14 N71-28958	US-PATENT-3, 257, 780	c15 N71-15968
US-PATENT-3, 198, 709	c22 N70-34501	US-PATENT-3, 258, 582	c02 N71-13421
US-PATENT-3, 198, 955	c08 N70-34743	US-PATENT-3, 258, 687	c14 N71-15962
US-PATENT-3, 198, 954	c26 N73-28710	US-PATENT-3, 258, 831	c15 N71-15986
US-PATENT-3, 199, 340	c14 N70-34799	US-PATENT-3, 258, 912	c27 N71-15634
US-PATENT-3, 199, 343	c11 N70-34844	US-PATENT-3, 258, 918	c27 N71-15635
US-PATENT-3, 199, 531	c15 N70-34664	US-PATENT-3, 260, 055	c23 N71-15467
US-PATENT-3, 200, 706	c03 N70-34667	US-PATENT-3, 260, 204	c31 N71-15692
US-PATENT-3, 201, 560	c33 N70-34540	US-PATENT-3, 260, 326	c11 N71-28779
US-PATENT-3, 201, 635	c25 N70-34661	US-PATENT-3, 261, 210	c14 N71-15969
US-PATENT-3, 201, 980	c14 N70-40203	US-PATENT-3, 262, 025	c15 N73-32361
US-PATENT-3, 202, 381	c31 N70-34176	US-PATENT-3, 262, 186	c15 N71-16052
US-PATENT-3, 202, 358	c28 N71-28928	US-PATENT-3, 262, 262	c28 N71-15661
US-PATENT-3, 202, 582	c22 N70-34572	US-PATENT-3, 262, 351	c15 N71-15922
US-PATENT-3, 202, 844	c03 N70-34134	US-PATENT-3, 262, 365	c31 N71-15675
US-PATENT-3, 202, 915	c14 N70-38602	US-PATENT-3, 262, 395	c15 N71-30028
US-PATENT-3, 202, 958	c31 N70-34135	US-PATENT-3, 262, 518	c05 N71-11199
US-PATENT-3, 204, 447	c14 N70-34156	US-PATENT-3, 262, 655	c31 N71-15663
US-PATENT-3, 204, 889	c03 N70-34157	US-PATENT-3, 263, 016	c33 N71-15625
US-PATENT-3, 205, 141	c14 N70-34669	US-PATENT-3, 263, 171	c09 N71-13530
US-PATENT-3, 205, 361	c14 N70-34158	US-PATENT-3, 263, 610	c15 N71-13789
US-PATENT-3, 205, 362	c21 N70-35089	US-PATENT-3, 264, 135	c15 N71-16075
US-PATENT-3, 205, 381	c03 N70-35408	US-PATENT-3, 270, 441	c11 N71-16028
US-PATENT-3, 206, 141	c21 N70-35395	US-PATENT-3, 270, 499	c28 N71-15660
US-PATENT-3, 206, 897	c18 N75-27040	US-PATENT-3, 270, 501	c31 N71-15647
US-PATENT-3, 208, 215	c28 N70-34162	US-PATENT-3, 270, 503	c33 N71-15623
US-PATENT-3, 208, 272	c14 N70-34161	US-PATENT-3, 270, 504	c31 N71-15637
US-PATENT-3, 208, 654	c02 N70-34160	US-PATENT-3, 270, 505	c21 N71-15582
US-PATENT-3, 208, 707	c31 N70-34159	US-PATENT-3, 270, 512	c15 N71-15906
US-PATENT-3, 209, 360	c09 N70-35219	US-PATENT-3, 270, 565	c14 N71-30265
US-PATENT-3, 209, 361	c09 N70-35425	US-PATENT-3, 270, 756	c15 N71-15967
US-PATENT-3, 210, 927	c28 N70-34175	US-PATENT-3, 270, 802	c33 N71-24876
US-PATENT-3, 211, 169	c15 N70-35087	US-PATENT-3, 270, 835	c28 N70-41582
US-PATENT-3, 211, 414	c15 N70-35407	US-PATENT-3, 270, 908	c31 N71-15664
US-PATENT-3, 212, 056	c09 N70-35382	US-PATENT-3, 270, 985	c21 N71-15583
US-PATENT-3, 212, 259	c28 N71-29153	US-PATENT-3, 270, 986	c05 N71-12336
US-PATENT-3, 212, 325	c14 N70-34705	US-PATENT-3, 270, 988	c01 N71-13410
US-PATENT-3, 212, 564	c33 N71-29052	US-PATENT-3, 270, 989	c02 N71-11041
US-PATENT-3, 215, 572	c12 N70-40124	US-PATENT-3, 270, 990	c28 N71-15563
US-PATENT-3, 215, 842	c16 N71-28963	US-PATENT-3, 271, 140	c17 N71-15644
US-PATENT-3, 216, 007	c08 N70-40125	US-PATENT-3, 271, 181	c15 N71-16077
US-PATENT-3, 217, 624	c14 N70-40273	US-PATENT-3, 271, 532	c09 N71-16089
US-PATENT-3, 218, 479	c09 N70-40272	US-PATENT-3, 271, 558	c15 N71-15871
US-PATENT-3, 218, 547	c09 N70-40123	US-PATENT-3, 271, 594	c10 N71-28739
US-PATENT-3, 218, 850	c14 N70-40400	US-PATENT-3, 271, 620	c09 N71-12540
US-PATENT-3, 219, 250	c15 N70-40204	US-PATENT-3, 271, 637	c26 N71-18064
US-PATENT-3, 219, 365	c15 N71-28937	US-PATENT-3, 271, 649	c10 N71-16030
US-PATENT-3, 219, 957	c08 N73-28045	US-PATENT-3, 273, 094	c23 N71-29049
US-PATENT-3, 220, 064	c30 N70-40309	US-PATENT-3, 273, 355	c33 N71-17897
US-PATENT-3, 221, 547	c14 N70-40201	US-PATENT-3, 273, 381	c32 N71-17645
US-PATENT-3, 221, 549	c14 N70-40157	US-PATENT-3, 273, 388	c09 N71-16086
US-PATENT-3, 223, 374	c15 N70-40156	US-PATENT-3, 273, 392	c23 N71-17802
US-PATENT-3, 224, 001	c07 N70-40063	US-PATENT-3, 273, 399	c12 N71-24692
US-PATENT-3, 224, 173	c15 N70-40062	US-PATENT-3, 274, 304	c26 N71-17818
US-PATENT-3, 224, 263	c15 N70-40180	US-PATENT-3, 275, 794	c37 N75-27376
US-PATENT-3, 224, 336	c30 N70-40353	US-PATENT-3, 276, 251	c11 N71-15926
US-PATENT-3, 228, 452	c15 N70-40354	US-PATENT-3, 276, 376	c31 N71-17629
US-PATENT-3, 228, 558	c14 N70-40233	US-PATENT-3, 276, 602	c32 N71-17609
US-PATENT-3, 229, 059	c14 N70-40238	US-PATENT-3, 276, 679	c15 N71-16079
US-PATENT-3, 229, 102	c14 N70-40239	US-PATENT-3, 276, 722	c02 N71-16087
US-PATENT-3, 229, 139	c28 N70-39925	US-PATENT-3, 276, 726	c31 N71-16081
US-PATENT-3, 229, 155	c25 N70-41628	US-PATENT-3, 276, 865	c17 N71-16025
US-PATENT-3, 229, 463	c28 N70-39931	US-PATENT-3, 276, 866	c17 N71-16026
US-PATENT-3, 229, 568	c14 N70-40003	US-PATENT-3, 276, 946	c23 N71-15978
US-PATENT-3, 229, 636	c03 N70-39930	US-PATENT-3, 277, 314	c10 N71-16042
US-PATENT-3, 229, 682	c09 N70-40234	US-PATENT-3, 277, 366	c10 N71-16057
US-PATENT-3, 229, 689	c05 N70-39922	US-PATENT-3, 277, 373	c07 N71-16088
US-PATENT-3, 229, 884	c15 N70-39924	US-PATENT-3, 277, 375	c07 N71-11284
US-PATENT-3, 229, 930	c30 N70-40016	US-PATENT-3, 277, 458	c10 N71-16058
US-PATENT-3, 230, 053	c26 N70-40015	US-PATENT-3, 277, 486	c31 N71-10747
US-PATENT-3, 236, 066	c15 N71-28959	US-PATENT-3, 279, 193	c33 N71-28852
US-PATENT-3, 237, 253	c15 N71-15966	US-PATENT-3, 281, 558	c33 N75-27249
US-PATENT-3, 238, 345	c11 N71-15925	US-PATENT-3, 281, 963	c11 N71-10746
US-PATENT-3, 238, 413	c25 N71-29184	US-PATENT-3, 281, 964	c11 N71-10776
US-PATENT-3, 238, 715	c28 N71-14043	US-PATENT-3, 281, 965	c11 N71-10748

NUMBER INDEX

US-PATENT-3, 282, 035	c11	N71-10777	US-PATENT-3, 310, 262	c02	N71-12243
US-PATENT-3, 282, 091	c14	N71-10781	US-PATENT-3, 310, 443	c24	N71-10560
US-PATENT-3, 282, 532	c31	N71-17729	US-PATENT-3, 310, 699	c14	N73-32324
US-PATENT-3, 282, 541	c31	N71-24750	US-PATENT-3, 310, 978	c14	N71-10616
US-PATENT-3, 282, 739	c03	N71-11053	US-PATENT-3, 310, 980	c11	N71-10604
US-PATENT-3, 282, 740	c03	N71-11051	US-PATENT-3, 311, 315	c07	N71-10609
US-PATENT-3, 283, 086	c10	N71-15909	US-PATENT-3, 311, 502	c03	N71-10608
US-PATENT-3, 283, 175	c10	N71-15910	US-PATENT-3, 311, 510	c26	N71-10607
US-PATENT-3, 283, 241	c14	N71-16014	US-PATENT-3, 311, 748	c21	N71-10678
US-PATENT-3, 286, 274	c05	N71-12335	US-PATENT-3, 311, 772	c09	N71-10618
US-PATENT-3, 286, 531	c30	N71-17788	US-PATENT-3, 311, 832	c07	N71-10775
US-PATENT-3, 286, 629	c31	N71-17730	US-PATENT-3, 312, 101	c14	N71-10774
US-PATENT-3, 286, 630	c31	N71-10582	US-PATENT-3, 316, 716	c28	N71-10780
US-PATENT-3, 286, 882	c27	N71-29155	US-PATENT-3, 316, 752	c14	N71-10779
US-PATENT-3, 286, 953	c21	N70-41856	US-PATENT-3, 316, 991	c14	N71-10773
US-PATENT-3, 286, 957	c02	N70-41863	US-PATENT-3, 317, 180	c15	N71-10778
US-PATENT-3, 287, 031	c15	N70-41808	US-PATENT-3, 317, 341	c18	N71-10772
US-PATENT-3, 287, 174	c03	N70-41864	US-PATENT-3, 317, 352	c03	N71-10728
US-PATENT-3, 287, 496	c14	N70-41807	US-PATENT-3, 317, 641	c15	N71-10672
US-PATENT-3, 287, 582	c28	N70-41576	US-PATENT-3, 317, 731	c21	N71-10771
US-PATENT-3, 287, 640	c09	N70-41655	US-PATENT-3, 317, 751	c09	N71-10673
US-PATENT-3, 287, 660	c16	N70-41578	US-PATENT-3, 317, 797	c10	N71-28783
US-PATENT-3, 287, 725	c07	N70-41680	US-PATENT-3, 317, 832	c09	N71-10659
US-PATENT-3, 289, 205	c07	N70-41678	US-PATENT-3, 318, 093	c15	N71-10658
US-PATENT-3, 295, 360	c14	N70-41681	US-PATENT-3, 318, 056	c28	N71-28849
US-PATENT-3, 295, 366	c11	N70-41677	US-PATENT-3, 318, 343	c15	N71-10809
US-PATENT-3, 295, 377	c14	N70-41682	US-PATENT-3, 318, 622	c15	N71-10799
US-PATENT-3, 295, 386	c05	N70-41581	US-PATENT-3, 319, 175	c09	N71-10798
US-PATENT-3, 295, 512	c03	N70-41580	US-PATENT-3, 319, 979	c15	N71-10782
US-PATENT-3, 295, 545	c15	N70-41646	US-PATENT-3, 320, 669	c15	N70-42017
US-PATENT-3, 295, 556	c32	N70-41579	US-PATENT-3, 321, 034	c15	N70-42034
US-PATENT-3, 295, 684	c28	N70-41447	US-PATENT-3, 321, 154	c31	N70-42075
US-PATENT-3, 295, 699	c32	N70-41367	US-PATENT-3, 321, 157	c02	N70-42016
US-PATENT-3, 295, 782	c14	N70-41647	US-PATENT-3, 321, 159	c31	N70-42015
US-PATENT-3, 295, 750	c31	N70-41588	US-PATENT-3, 321, 570	c15	N70-41960
US-PATENT-3, 295, 798	c02	N70-41589	US-PATENT-3, 321, 628	c10	N70-41991
US-PATENT-3, 295, 808	c15	N70-41310	US-PATENT-3, 321, 645	c10	N70-42032
US-PATENT-3, 296, 060	c18	N70-41583	US-PATENT-3, 321, 922	c28	N70-41992
US-PATENT-3, 296, 526	c14	N70-41332	US-PATENT-3, 323, 356	c15	N70-41993
US-PATENT-3, 296, 531	c07	N70-41331	US-PATENT-3, 323, 362	c14	N70-41994
US-PATENT-3, 298, 175	c33	N71-29053	US-PATENT-3, 323, 370	c05	N70-42000
US-PATENT-3, 298, 182	c28	N70-41311	US-PATENT-3, 323, 386	c03	N70-42073
US-PATENT-3, 298, 221	c14	N70-41330	US-PATENT-3, 323, 408	c14	N70-41955
US-PATENT-3, 298, 285	c32	N70-41370	US-PATENT-3, 323, 484	c14	N70-42074
US-PATENT-3, 298, 362	c05	N70-41329	US-PATENT-3, 323, 967	c15	N70-42033
US-PATENT-3, 298, 582	c14	N71-28935	US-PATENT-3, 324, 370	c09	N71-10677
US-PATENT-3, 299, 364	c16	N71-15550	US-PATENT-3, 324, 388	c14	N71-10797
US-PATENT-3, 299, 431	c07	N71-28979	US-PATENT-3, 324, 423	c07	N71-10676
US-PATENT-3, 299, 913	c15	N71-15918	US-PATENT-3, 324, 659	c28	N71-10574
US-PATENT-3, 300, 162	c31	N70-41373	US-PATENT-3, 325, 229	c15	N71-10617
US-PATENT-3, 300, 717	c25	N71-15650	US-PATENT-3, 325, 723	c10	N71-10578
US-PATENT-3, 300, 731	c07	N70-41372	US-PATENT-3, 325, 749	c09	N71-28810
US-PATENT-3, 300, 847	c15	N70-41371	US-PATENT-3, 326, 043	c14	N71-10500
US-PATENT-3, 300, 949	c05	N70-41297	US-PATENT-3, 326, 407	c15	N71-10577
US-PATENT-3, 300, 981	c28	N70-41275	US-PATENT-3, 327, 298	c08	N71-21042
US-PATENT-3, 301, 046	c14	N70-41366	US-PATENT-3, 327, 991	c15	N71-21234
US-PATENT-3, 301, 315	c09	N70-41717	US-PATENT-3, 328, 624	c28	N71-28850
US-PATENT-3, 301, 507	c31	N70-41631	US-PATENT-3, 329, 375	c21	N71-21708
US-PATENT-3, 301, 511	c02	N70-41630	US-PATENT-3, 329, 918	c09	N71-21583
US-PATENT-3, 301, 578	c15	N70-41629	US-PATENT-3, 330, 052	c11	N71-21474
US-PATENT-3, 302, 023	c14	N70-41676	US-PATENT-3, 330, 082	c15	N71-21531
US-PATENT-3, 302, 040	c09	N70-41675	US-PATENT-3, 330, 510	c31	N71-28851
US-PATENT-3, 302, 569	c15	N70-41679	US-PATENT-3, 330, 549	c15	N71-21530
US-PATENT-3, 302, 633	c05	N70-41819	US-PATENT-3, 331, 071	c07	N71-28900
US-PATENT-3, 302, 662	c15	N70-41811	US-PATENT-3, 331, 246	c11	N71-21475
US-PATENT-3, 302, 960	c15	N70-41829	US-PATENT-3, 331, 255	c15	N71-21529
US-PATENT-3, 303, 304	c14	N70-41812	US-PATENT-3, 331, 404	c12	N71-21089
US-PATENT-3, 304, 028	c31	N70-41855	US-PATENT-3, 331, 951	c21	N71-21688
US-PATENT-3, 304, 718	c28	N70-41922	US-PATENT-3, 333, 152	c25	N71-21693
US-PATENT-3, 304, 724	c31	N70-41948	US-PATENT-3, 333, 788	c31	N71-21881
US-PATENT-3, 304, 729	c31	N70-41871	US-PATENT-3, 334, 225	c14	N73-32325
US-PATENT-3, 304, 768	c32	N70-42003	US-PATENT-3, 336, 725	c15	N71-21528
US-PATENT-3, 304, 773	c14	N70-41957	US-PATENT-3, 336, 748	c25	N71-21694
US-PATENT-3, 304, 799	c03	N70-41954	US-PATENT-3, 336, 754	c28	N71-22983
US-PATENT-3, 304, 865	c28	N70-41967	US-PATENT-3, 337, 004	c14	N71-23092
US-PATENT-3, 305, 415	c27	N70-41897	US-PATENT-3, 337, 279	c05	N71-23080
US-PATENT-3, 305, 636	c08	N70-41961	US-PATENT-3, 337, 315	c18	N71-23088
US-PATENT-3, 305, 801	c10	N70-41964	US-PATENT-3, 337, 337	c18	N71-22894
US-PATENT-3, 305, 810	c09	N70-41929	US-PATENT-3, 337, 790	c12	N71-20896
US-PATENT-3, 305, 861	c21	N70-41930	US-PATENT-3, 337, 812	c09	N71-23097
US-PATENT-3, 305, 870	c07	N71-15907	US-PATENT-3, 339, 404	c14	N71-22765
US-PATENT-3, 308, 848	c12	N71-16031	US-PATENT-3, 339, 863	c14	N71-23040
US-PATENT-3, 309, 012	c33	N71-17610	US-PATENT-3, 340, 099	c03	N71-23006
US-PATENT-3, 309, 961	c15	N71-16078	US-PATENT-3, 340, 395	c14	N71-23041
US-PATENT-3, 310, 054	c08	N71-15908	US-PATENT-3, 340, 397	c11	N71-23042
US-PATENT-3, 310, 138	c12	N71-16894	US-PATENT-3, 340, 430	c09	N71-22796
US-PATENT-3, 310, 256	c31	N71-17679	US-PATENT-3, 340, 532	c10	N71-21473
US-PATENT-3, 310, 258	c31	N71-17691	US-PATENT-3, 340, 599	c09	N71-23027
US-PATENT-3, 310, 261	c02	N71-11038	US-PATENT-3, 340, 713	c15	N71-22723

NUMBER INDEX

US-PATENT-3,340,732	c02	N71-23007	US-PATENT-3,367,182	c33	N71-23085
US-PATENT-3,341,151	c31	N71-23009	US-PATENT-3,367,224	c15	N71-22798
US-PATENT-3,341,169	c15	N71-23024	US-PATENT-3,367,271	c15	N71-24042
US-PATENT-3,341,708	c16	N71-22895	US-PATENT-3,367,308	c11	N71-22875
US-PATENT-3,341,778	c07	N71-23098	US-PATENT-3,367,445	c15	N71-23048
US-PATENT-3,341,977	c15	N71-22705	US-PATENT-3,368,486	c15	N71-22874
US-PATENT-3,342,055	c15	N71-22797	US-PATENT-3,369,222	c08	N71-22707
US-PATENT-3,342,066	c11	N71-23030	US-PATENT-3,369,223	c08	N71-22710
US-PATENT-3,342,653	c15	N71-22713	US-PATENT-3,369,564	c15	N71-23051
US-PATENT-3,343,180	c05	N71-23159	US-PATENT-3,370,039	c06	N71-28807
US-PATENT-3,343,189	c05	N71-22748	US-PATENT-3,372,588	c33	N71-29051
US-PATENT-3,344,340	c09	N71-21449	US-PATENT-3,373,016	c26	N75-27127
US-PATENT-3,344,425	c10	N71-21483	US-PATENT-3,373,069	c15	N71-23052
US-PATENT-3,345,820	c28	N71-21822	US-PATENT-3,373,404	c08	N71-22749
US-PATENT-3,345,822	c27	N71-21819	US-PATENT-3,373,430	c09	N71-22888
US-PATENT-3,345,840	c15	N71-21536	US-PATENT-3,373,431	c07	N71-22750
US-PATENT-3,345,866	c11	N71-21481	US-PATENT-3,373,640	c15	N71-22722
US-PATENT-3,346,419	c03	N71-20895	US-PATENT-3,373,914	c15	N71-23050
US-PATENT-3,346,442	c18	N71-21651	US-PATENT-3,374,339	c08	N71-22897
US-PATENT-3,346,515	c06	N71-20905	US-PATENT-3,374,366	c09	N71-23015
US-PATENT-3,346,724	c15	N71-21179	US-PATENT-3,374,830	c33	N71-22890
US-PATENT-3,346,806	c14	N71-21090	US-PATENT-3,375,451	c10	N71-22986
US-PATENT-3,346,929	c15	N71-21076	US-PATENT-3,375,479	c15	N71-23049
US-PATENT-3,347,046	c33	N71-21507	US-PATENT-3,375,712	c35	N75-29382
US-PATENT-3,347,309	c33	N71-29046	US-PATENT-3,375,885	c15	N73-32362
US-PATENT-3,347,465	c18	N71-21068	US-PATENT-3,376,730	c14	N71-22995
US-PATENT-3,347,466	c28	N71-21493	US-PATENT-3,377,208	c14	N71-23039
US-PATENT-3,347,531	c15	N71-21177	US-PATENT-3,377,845	c14	N71-22992
US-PATENT-3,347,665	c17	N71-20743	US-PATENT-3,378,315	c15	N71-22997
US-PATENT-3,348,048	c14	N71-21088	US-PATENT-3,378,851	c05	N71-23096
US-PATENT-3,348,053	c10	N71-20782	US-PATENT-3,378,892	c15	N71-22994
US-PATENT-3,348,152	c10	N71-20841	US-PATENT-3,379,052	c14	N73-32321
US-PATENT-3,348,218	c10	N71-29135	US-PATENT-3,379,064	c14	N71-23093
US-PATENT-3,349,814	c33	N71-20834	US-PATENT-3,379,330	c23	N71-22881
US-PATENT-3,350,033	c14	N71-21082	US-PATENT-3,379,885	c09	N71-22985
US-PATENT-3,350,034	c31	N71-21064	US-PATENT-3,379,978	c14	N71-22990
US-PATENT-3,350,214	c17	N71-20941	US-PATENT-3,380,042	c07	N71-23001
US-PATENT-3,350,643	c07	N71-20791	US-PATENT-3,380,049	c10	N71-23099
US-PATENT-3,350,671	c09	N71-20842	US-PATENT-3,381,339	c06	N71-22975
US-PATENT-3,350,926	c14	N71-21091	US-PATENT-3,381,517	c09	N71-22988
US-PATENT-3,352,157	c14	N71-21072	US-PATENT-3,381,527	c15	N71-22878
US-PATENT-3,352,152	c15	N71-21489	US-PATENT-3,381,569	c21	N71-22880
US-PATENT-3,353,359	c28	N71-20942	US-PATENT-3,381,778	c15	N71-22877
US-PATENT-3,354,058	c06	N71-20717	US-PATENT-3,382,082	c18	N71-22998
US-PATENT-3,354,320	c23	N71-21821	US-PATENT-3,382,105	c03	N71-29044
US-PATENT-3,354,462	c14	N71-21006	US-PATENT-3,382,107	c03	N71-22974
US-PATENT-3,355,861	c18	N71-20742	US-PATENT-3,382,714	c14	N71-22989
US-PATENT-3,355,948	c14	N71-21007	US-PATENT-3,383,461	c07	N71-23026
US-PATENT-3,356,320	c05	N71-20718	US-PATENT-3,383,524	c10	N71-23029
US-PATENT-3,356,549	c15	N71-21404	US-PATENT-3,383,903	c14	N71-23036
US-PATENT-3,356,885	c25	N71-20747	US-PATENT-3,383,922	c14	N71-22752
US-PATENT-3,357,024	c12	N71-20815	US-PATENT-3,384,016	c31	N71-23008
US-PATENT-3,357,093	c15	N71-21078	US-PATENT-3,384,075	c05	N71-22896
US-PATENT-3,357,237	c33	N71-21586	US-PATENT-3,384,111	c15	N71-22706
US-PATENT-3,357,862	c03	N71-20904	US-PATENT-3,384,324	c33	N71-22792
US-PATENT-3,358,145	c14	N71-21040	US-PATENT-3,384,820	c09	N71-23021
US-PATENT-3,358,264	c09	N71-20851	US-PATENT-3,384,895	c07	N71-22984
US-PATENT-3,359,046	c15	N71-20739	US-PATENT-3,385,036	c15	N71-22721
US-PATENT-3,359,132	c09	N71-20705	US-PATENT-3,386,337	c15	N71-22799
US-PATENT-3,359,409	c07	N71-21476	US-PATENT-3,386,685	c31	N71-22968
US-PATENT-3,359,435	c15	N71-21311	US-PATENT-3,386,686	c31	N71-22969
US-PATENT-3,359,555	c09	N71-20864	US-PATENT-3,387,149	c14	N71-22993
US-PATENT-3,359,819	c15	N71-21744	US-PATENT-3,388,258	c14	N71-22996
US-PATENT-3,359,855	c23	N71-21882	US-PATENT-3,388,387	c10	N71-23033
US-PATENT-3,360,798	c09	N71-20658	US-PATENT-3,388,590	c14	N71-23087
US-PATENT-3,360,864	c14	N71-24693	US-PATENT-3,389,017	c15	N71-23022
US-PATENT-3,360,972	c15	N71-24833	US-PATENT-3,389,260	c14	N71-23269
US-PATENT-3,360,980	c14	N71-20741	US-PATENT-3,389,346	c10	N71-28859
US-PATENT-3,360,988	c09	N71-20816	US-PATENT-3,389,877	c15	N71-28936
US-PATENT-3,361,045	c15	N71-21060	US-PATENT-3,390,017	c03	N71-23336
US-PATENT-3,361,067	c26	N71-21824	US-PATENT-3,390,020	c26	N71-23654
US-PATENT-3,361,400	c15	N71-20813	US-PATENT-3,390,023	c26	N75-29236
US-PATENT-3,361,666	c15	N71-21403	US-PATENT-3,390,282	c09	N71-23311
US-PATENT-3,361,985	c10	N71-20852	US-PATENT-3,390,378	c08	N71-23295
US-PATENT-3,364,311	c07	N71-20814	US-PATENT-3,391,080	c15	N71-24046
US-PATENT-3,364,366	c09	N71-28926	US-PATENT-3,392,403	c23	N71-23976
US-PATENT-3,364,578	c14	N71-21079	US-PATENT-3,392,586	c14	N71-24232
US-PATENT-3,364,631	c32	N71-21045	US-PATENT-3,392,864	c18	N71-23658
US-PATENT-3,364,777	c15	N71-20740	US-PATENT-3,392,865	c15	N71-23816
US-PATENT-3,364,813	c09	N71-22999	US-PATENT-3,392,936	c01	N71-23497
US-PATENT-3,365,657	c10	N71-22961	US-PATENT-3,393,059	c06	N71-23499
US-PATENT-3,365,665	c14	N71-23037	US-PATENT-3,393,330	c22	N71-23599
US-PATENT-3,365,857	c33	N71-28892	US-PATENT-3,393,332	c09	N71-23443
US-PATENT-3,365,930	c14	N71-22964	US-PATENT-3,393,347	c10	N71-23543
US-PATENT-3,365,941	c14	N71-22965	US-PATENT-3,393,380	c10	N71-23544
US-PATENT-3,366,886	c10	N71-22962	US-PATENT-3,393,384	c09	N71-23573
US-PATENT-3,366,894	c10	N71-23084	US-PATENT-3,394,286	c14	N73-30391
US-PATENT-3,367,114	c28	N71-23081	US-PATENT-3,394,359	c08	N71-28925
US-PATENT-3,367,121	c15	N71-23025	US-PATENT-3,394,975	c23	N71-30027

NUMBER INDEX

US-PATENT-3,395,053	c18 N71-23047	US-PATENT-3,421,864	c17 N71-23046
US-PATENT-3,395,565	c14 N73-30390	US-PATENT-3,421,948	c03 N69-21337
US-PATENT-3,396,057	c26 N71-23043	US-PATENT-3,422,213	c03 N69-21539
US-PATENT-3,396,184	c06 N71-28808	US-PATENT-3,422,278	c09 N69-21468
US-PATENT-3,396,303	c09 N71-22987	US-PATENT-3,422,291	c25 N69-21929
US-PATENT-3,396,584	c14 N71-30026	US-PATENT-3,422,324	c14 N69-21541
US-PATENT-3,396,920	c31 N71-29050	US-PATENT-3,422,352	c14 N71-19431
US-PATENT-3,397,094	c26 N71-29156	US-PATENT-3,422,354	c09 N69-21926
US-PATENT-3,397,117	c15 N71-23086	US-PATENT-3,422,390	c09 N69-21927
US-PATENT-3,397,318	c14 N71-22991	US-PATENT-3,422,403	c08 N69-21928
US-PATENT-3,397,512	c15 N71-23023	US-PATENT-3,422,440	c09 N69-21467
US-PATENT-3,397,932	c15 N71-22982	US-PATENT-3,423,179	c15 N69-21922
US-PATENT-3,399,259	c10 N71-23662	US-PATENT-3,423,290	c06 N71-17705
US-PATENT-3,399,574	c32 N71-24285	US-PATENT-3,423,575	c09 N71-19480
US-PATENT-3,402,265	c09 N73-28084	US-PATENT-3,423,608	c09 N69-21313
US-PATENT-3,404,289	c09 N71-23545	US-PATENT-3,424,966	c10 N71-20448
US-PATENT-3,404,348	c32 N74-22096	US-PATENT-3,425,131	c15 N71-19489
US-PATENT-3,405,406	c05 N71-23161	US-PATENT-3,425,268	c14 N69-39975
US-PATENT-3,405,887	c31 N71-24315	US-PATENT-3,425,272	c14 N71-20439
US-PATENT-3,406,336	c10 N71-24863	US-PATENT-3,425,276	c14 N69-24257
US-PATENT-3,406,742	c33 N71-24276	US-PATENT-3,425,486	c05 N71-24147
US-PATENT-3,407,304	c14 N71-23240	US-PATENT-3,425,487	c05 N71-19439
US-PATENT-3,408,816	c28 N71-24736	US-PATENT-3,425,885	c15 N69-24322
US-PATENT-3,408,870	c14 N71-23227	US-PATENT-3,426,219	c09 N69-24317
US-PATENT-3,409,247	c33 N71-28903	US-PATENT-3,426,230	c15 N69-24319
US-PATENT-3,409,252	c15 N71-23255	US-PATENT-3,426,263	c03 N71-19438
US-PATENT-3,409,554	c26 N71-23292	US-PATENT-3,426,272	c14 N69-39785
US-PATENT-3,409,730	c33 N71-24145	US-PATENT-3,426,746	c05 N71-26293
US-PATENT-3,411,356	c14 N71-23226	US-PATENT-3,426,791	c15 N71-19569
US-PATENT-3,411,900	c26 N75-27126	US-PATENT-3,427,047	c15 N69-27490
US-PATENT-3,412,559	c28 N71-23293	US-PATENT-3,427,089	c23 N69-24322
US-PATENT-3,412,558	c14 N71-23225	US-PATENT-3,427,093	c09 N71-19479
US-PATENT-3,412,729	c04 N71-23185	US-PATENT-3,427,097	c11 N69-24321
US-PATENT-3,412,561	c32 N71-23971	US-PATENT-3,427,205	c15 N69-24320
US-PATENT-3,413,115	c17 N71-23365	US-PATENT-3,427,435	c17 N69-25147
US-PATENT-3,413,393	c17 N71-29137	US-PATENT-3,427,454	c05 N71-19440
US-PATENT-3,413,510	c09 N71-23190	US-PATENT-3,427,525	c03 N69-21330
US-PATENT-3,413,536	c03 N71-24605	US-PATENT-3,428,761	c09 N69-24329
US-PATENT-3,414,012	c09 N71-23191	US-PATENT-3,428,812	c14 N69-27485
US-PATENT-3,414,358	c14 N71-23175	US-PATENT-3,428,847	c15 N69-24266
US-PATENT-3,415,032	c15 N71-23256	US-PATENT-3,428,910	c09 N69-24330
US-PATENT-3,415,069	c15 N71-24044	US-PATENT-3,428,919	c07 N69-24334
US-PATENT-3,415,116	c14 N71-23790	US-PATENT-3,428,923	c07 N69-27462
US-PATENT-3,415,126	c21 N71-23289	US-PATENT-3,429,058	c12 N69-39988
US-PATENT-3,415,156	c15 N71-24043	US-PATENT-3,429,177	c06 N69-39733
US-PATENT-3,415,643	c17 N71-23248	US-PATENT-3,429,477	c15 N69-27502
US-PATENT-3,416,106	c09 N71-24808	US-PATENT-3,430,063	c09 N69-27500
US-PATENT-3,416,274	c31 N71-24035	US-PATENT-3,430,115	c09 N69-24318
US-PATENT-3,416,939	c18 N71-24183	US-PATENT-3,430,131	c24 N71-20518
US-PATENT-3,416,975	c17 N71-23828	US-PATENT-3,430,182	c14 N69-27431
US-PATENT-3,416,988	c15 N71-24164	US-PATENT-3,430,227	c08 N71-19687
US-PATENT-3,417,247	c14 N71-23797	US-PATENT-3,430,237	c07 N69-39974
US-PATENT-3,417,266	c09 N71-23270	US-PATENT-3,430,460	c15 N69-27505
US-PATENT-3,417,298	c10 N71-23271	US-PATENT-3,430,902	c14 N69-27486
US-PATENT-3,417,316	c14 N71-23174	US-PATENT-3,430,909	c11 N69-27466
US-PATENT-3,417,321	c09 N71-23316	US-PATENT-3,430,937	c15 N69-27483
US-PATENT-3,417,332	c07 N71-23405	US-PATENT-3,430,942	c15 N69-27504
US-PATENT-3,417,399	c30 N71-23723	US-PATENT-3,431,149	c14 N69-27459
US-PATENT-3,417,400	c07 N71-28809	US-PATENT-3,431,397	c15 N69-27871
US-PATENT-3,418,329	c14 N71-23268	US-PATENT-3,431,460	c09 N71-23189
US-PATENT-3,419,363	c18 N71-23710	US-PATENT-3,431,559	c09 N69-24333
US-PATENT-3,419,384	c17 N73-28573	US-PATENT-3,432,730	c09 N69-27422
US-PATENT-3,419,433	c03 N71-23187	US-PATENT-3,433,015	c28 N71-20330
US-PATENT-3,419,537	c06 N71-23500	US-PATENT-3,433,079	c14 N69-27503
US-PATENT-3,419,827	c09 N71-23548	US-PATENT-3,433,662	c14 N71-20461
US-PATENT-3,419,964	c14 N69-21363	US-PATENT-3,433,818	c06 N71-23230
US-PATENT-3,419,992	c14 N71-23401	US-PATENT-3,433,909	c10 N71-23663
US-PATENT-3,420,069	c15 N69-21465	US-PATENT-3,433,953	c14 N69-27484
US-PATENT-3,420,223	c05 N69-21925	US-PATENT-3,433,960	c16 N69-27491
US-PATENT-3,420,225	c05 N69-21473	US-PATENT-3,433,961	c14 N69-27432
US-PATENT-3,420,253	c12 N69-21466	US-PATENT-3,434,033	c09 N69-39984
US-PATENT-3,420,338	c15 N71-26243	US-PATENT-3,434,037	c10 N71-26414
US-PATENT-3,420,471	c05 N69-21380	US-PATENT-3,434,050	c09 N71-20569
US-PATENT-3,420,704	c15 N69-21460	US-PATENT-3,434,064	c09 N69-39986
US-PATENT-3,420,545	c09 N69-21542	US-PATENT-3,434,855	c18 N71-24184
US-PATENT-3,420,978	c15 N69-21471	US-PATENT-3,434,865	c03 N71-20492
US-PATENT-3,421,004	c14 N71-19568	US-PATENT-3,435,246	c14 N69-24331
US-PATENT-3,421,053	c15 N69-21472	US-PATENT-3,437,394	c14 N69-27461
US-PATENT-3,421,056	c14 N69-23191	US-PATENT-3,437,527	c03 N69-24267
US-PATENT-3,421,105	c09 N69-21543	US-PATENT-3,437,560	c04 N69-27487
US-PATENT-3,421,134	c09 N69-21470	US-PATENT-3,437,818	c03 N71-23354
US-PATENT-3,421,331	c15 N69-23190	US-PATENT-3,437,832	c09 N69-27463
US-PATENT-3,421,363	c11 N69-21540	US-PATENT-3,437,874	c08 N71-20571
US-PATENT-3,421,506	c05 N69-23192	US-PATENT-3,437,903	c03 N69-25146
US-PATENT-3,421,541	c15 N69-21924	US-PATENT-3,437,919	c14 N69-27423
US-PATENT-3,421,549	c03 N69-21469	US-PATENT-3,437,935	c09 N69-24324
US-PATENT-3,421,591	c14 N69-21923	US-PATENT-3,437,959	c07 N69-24323
US-PATENT-3,421,700	c15 N69-23185	US-PATENT-3,438,044	c07 N69-27460
US-PATENT-3,421,768	c15 N69-21362	US-PATENT-3,438,263	c14 N71-20435

NUMBER INDEX

US-PATENT-3,439,886	c31	N69-27499	US-PATENT-3,465,569	c14	N71-17659
US-PATENT-3,440,419	c14	N73-28491	US-PATENT-3,465,584	c14	N71-23726
US-PATENT-3,443,128	c03	N69-39890	US-PATENT-3,465,638	c11	N71-18578
US-PATENT-3,443,208	c14	N71-20428	US-PATENT-3,465,986	c31	N71-20396
US-PATENT-3,443,384	c28	N71-24321	US-PATENT-3,466,052	c15	N71-19570
US-PATENT-3,443,350	c11	N71-24964	US-PATENT-3,466,085	c05	N71-12343
US-PATENT-3,443,412	c15	N71-23811	US-PATENT-3,466,158	c03	N71-19545
US-PATENT-3,443,416	c06	N69-39936	US-PATENT-3,466,243	c15	N71-23810
US-PATENT-3,443,472	c15	N71-23254	US-PATENT-3,466,418	c15	N71-18613
US-PATENT-3,443,583	c14	N71-18625	US-PATENT-3,466,424	c15	N71-20395
US-PATENT-3,443,584	c32	N71-16106	US-PATENT-3,466,459	c09	N71-26000
US-PATENT-3,443,722	c15	N71-15607	US-PATENT-3,466,484	c14	N71-18482
US-PATENT-3,443,773	c31	N71-23912	US-PATENT-3,466,560	c09	N71-19466
US-PATENT-3,443,779	c01	N69-39981	US-PATENT-3,466,570	c10	N71-25950
US-PATENT-3,444,051	c05	N71-11207	US-PATENT-3,467,837	c05	N71-23317
US-PATENT-3,444,127	c06	N71-11237	US-PATENT-3,468,303	c09	N71-26002
US-PATENT-3,444,375	c14	N71-15599	US-PATENT-3,468,548	c15	N71-26294
US-PATENT-3,444,380	c07	N69-39980	US-PATENT-3,468,609	c16	N71-24170
US-PATENT-3,446,075	c14	N73-30394	US-PATENT-3,468,727	c14	N71-25892
US-PATENT-3,446,387	c15	N69-39935	US-PATENT-3,468,765	c17	N71-25903
US-PATENT-3,446,558	c16	N71-24074	US-PATENT-3,469,068	c15	N71-23815
US-PATENT-3,446,642	c18	N69-39895	US-PATENT-3,469,069	c15	N71-23798
US-PATENT-3,446,676	c03	N71-11050	US-PATENT-3,469,087	c16	N71-25914
US-PATENT-3,446,560	c14	N69-39982	US-PATENT-3,469,143	c33	N75-29318
US-PATENT-3,446,552	c09	N69-39987	US-PATENT-3,469,289	c15	N71-25975
US-PATENT-3,446,557	c03	N69-39898	US-PATENT-3,469,375	c14	N71-18483
US-PATENT-3,446,958	c09	N69-39929	US-PATENT-3,469,436	c15	N71-23817
US-PATENT-3,447,003	c09	N71-20446	US-PATENT-3,469,437	c14	N71-24234
US-PATENT-3,447,115	c06	N69-39889	US-PATENT-3,469,734	c11	N71-17600
US-PATENT-3,447,071	c25	N69-39884	US-PATENT-3,470,043	c15	N71-24047
US-PATENT-3,447,154	c21	N71-11766	US-PATENT-3,470,304	c14	N71-23267
US-PATENT-3,447,155	c09	N71-18598	US-PATENT-3,470,313	c07	N71-26579
US-PATENT-3,447,233	c15	N69-39786	US-PATENT-3,470,318	c07	N71-24612
US-PATENT-3,447,774	c15	N71-19485	US-PATENT-3,470,342	c09	N71-19610
US-PATENT-3,447,850	c09	N71-18600	US-PATENT-3,470,443	c03	N71-23239
US-PATENT-3,448,273	c07	N69-39736	US-PATENT-3,470,446	c09	N71-23188
US-PATENT-3,448,290	c10	N71-23315	US-PATENT-3,470,466	c14	N71-23699
US-PATENT-3,448,341	c09	N71-12526	US-PATENT-3,470,475	c10	N71-19467
US-PATENT-3,448,346	c15	N71-18701	US-PATENT-3,470,489	c09	N71-23598
US-PATENT-3,450,842	c07	N69-39978	US-PATENT-3,470,495	c10	N71-23669
US-PATENT-3,450,878	c14	N71-20430	US-PATENT-3,470,456	c09	N71-19470
US-PATENT-3,450,546	c09	N69-39897	US-PATENT-3,471,856	c30	N71-16090
US-PATENT-3,452,103	c06	N73-30101	US-PATENT-3,471,858	c07	N71-12391
US-PATENT-3,452,423	c26	N71-16037	US-PATENT-3,472,019	c10	N71-26326
US-PATENT-3,452,872	c14	N69-39896	US-PATENT-3,472,059	c14	N71-23755
US-PATENT-3,453,172	c15	N69-39735	US-PATENT-3,472,060	c14	N71-26136
US-PATENT-3,453,462	c03	N69-39983	US-PATENT-3,472,069	c15	N71-20441
US-PATENT-3,453,546	c05	N71-12342	US-PATENT-3,472,080	c10	N71-26339
US-PATENT-3,454,410	c18	N69-39979	US-PATENT-3,472,086	c15	N71-23809
US-PATENT-3,454,766	c35	N75-27329	US-PATENT-3,472,140	c14	N71-26474
US-PATENT-3,455,121	c14	N71-20427	US-PATENT-3,472,202	c17	N71-24911
US-PATENT-3,455,171	c23	N71-16098	US-PATENT-3,472,372	c15	N71-20440
US-PATENT-3,456,112	c14	N69-39937	US-PATENT-3,472,470	c02	N71-20570
US-PATENT-3,456,193	c08	N71-19763	US-PATENT-3,472,577	c23	N71-24857
US-PATENT-3,456,201	c09	N69-39885	US-PATENT-3,472,625	c06	N71-23527
US-PATENT-3,458,104	c15	N71-20393	US-PATENT-3,472,629	c14	N71-20442
US-PATENT-3,458,313	c14	N71-17574	US-PATENT-3,472,658	c03	N71-23449
US-PATENT-3,458,651	c09	N71-19449	US-PATENT-3,472,709	c18	N71-26153
US-PATENT-3,458,702	c14	N71-18699	US-PATENT-3,472,742	c17	N71-24830
US-PATENT-3,458,726	c10	N69-39888	US-PATENT-3,472,998	c16	N71-20400
US-PATENT-3,458,833	c10	N71-19418	US-PATENT-3,473,050	c09	N71-20447
US-PATENT-3,458,851	c09	N69-39734	US-PATENT-3,473,116	c25	N71-20563
US-PATENT-3,459,351	c03	N71-11058	US-PATENT-3,473,165	c05	N71-26333
US-PATENT-3,460,378	c14	N71-24233	US-PATENT-3,473,216	c15	N71-20443
US-PATENT-3,460,379	c15	N71-24834	US-PATENT-3,473,379	c12	N71-26387
US-PATENT-3,460,381	c14	N71-23725	US-PATENT-3,473,758	c03	N71-20273
US-PATENT-3,460,357	c15	N71-24045	US-PATENT-3,474,192	c07	N71-26102
US-PATENT-3,460,759	c28	N71-23968	US-PATENT-3,474,220	c15	N71-19486
US-PATENT-3,460,781	c14	N71-23698	US-PATENT-3,474,328	c14	N71-26266
US-PATENT-3,460,555	c03	N71-20407	US-PATENT-3,474,357	c09	N71-20445
US-PATENT-3,461,250	c14	N71-26475	US-PATENT-3,474,413	c10	N71-26103
US-PATENT-3,461,393	c10	N71-26415	US-PATENT-3,474,441	c08	N71-19544
US-PATENT-3,461,437	c10	N71-26434	US-PATENT-3,475,384	c06	N73-30103
US-PATENT-3,461,700	c15	N71-26346	US-PATENT-3,475,442	c26	N75-27125
US-PATENT-3,461,721	c12	N71-20436	US-PATENT-3,478,514	c37	N77-22479
US-PATENT-3,463,001	c14	N71-20429	US-PATENT-3,480,789	c10	N71-26626
US-PATENT-3,463,563	c15	N71-23812	US-PATENT-3,481,638	c15	N71-26312
US-PATENT-3,463,673	c03	N71-20491	US-PATENT-3,481,887	c18	N71-26155
US-PATENT-3,463,679	c17	N71-24142	US-PATENT-3,482,179	c10	N71-26331
US-PATENT-3,463,761	c06	N73-30099	US-PATENT-3,483,535	c10	N71-26418
US-PATENT-3,463,762	c06	N73-30100	US-PATENT-3,484,712	c10	N71-26374
US-PATENT-3,463,639	c10	N71-19471	US-PATENT-3,486,123	c16	N71-24831
US-PATENT-3,464,012	c14	N71-26244	US-PATENT-3,487,216	c14	N71-24809
US-PATENT-3,464,016	c10	N71-19472	US-PATENT-3,487,281	c15	N71-24695
US-PATENT-3,464,018	c09	N71-23525	US-PATENT-3,487,288	c10	N71-25139
US-PATENT-3,464,049	c32	N71-15974	US-PATENT-3,487,680	c15	N71-17696
US-PATENT-3,464,051	c15	N71-17685	US-PATENT-3,488,103	c14	N71-15604
US-PATENT-3,465,482	c31	N71-16080	US-PATENT-3,488,123	c14	N71-17627
US-PATENT-3,465,567	c15	N71-18579	US-PATENT-3,488,414	c15	N71-17803

NUMBER INDEX

US-PATENT-3,488,461	c09 N71-12518	US-PATENT-3,508,156	c07 N71-11267
US-PATENT-3,488,544	c21 N71-15642	US-PATENT-3,508,347	c05 N71-24606
US-PATENT-3,490,130	c05 N71-12345	US-PATENT-3,508,402	c33 N71-16104
US-PATENT-3,490,205	c14 N71-17588	US-PATENT-3,508,541	c05 N71-11193
US-PATENT-3,490,235	c28 N71-14044	US-PATENT-3,508,578	c32 N71-16103
US-PATENT-3,490,238	c15 N70-22192	US-PATENT-3,508,723	c31 N71-16222
US-PATENT-3,490,405	c15 N71-15597	US-PATENT-3,508,724	c02 N71-11037
US-PATENT-3,490,440	c05 N71-12346	US-PATENT-3,508,739	c15 N71-17648
US-PATENT-3,490,718	c33 N71-14035	US-PATENT-3,508,779	c15 N71-24897
US-PATENT-3,490,719	c21 N71-14159	US-PATENT-3,508,940	c18 N71-16124
US-PATENT-3,490,721	c02 N71-11039	US-PATENT-3,508,955	c18 N71-16105
US-PATENT-3,490,939	c33 N71-14032	US-PATENT-3,508,999	c15 N71-17687
US-PATENT-3,490,965	c09 N71-12513	US-PATENT-3,509,034	c14 N71-17575
US-PATENT-3,491,202	c07 N71-12392	US-PATENT-3,509,386	c03 N71-11055
US-PATENT-3,491,255	c09 N71-12514	US-PATENT-3,509,419	c24 N71-16213
US-PATENT-3,491,335	c14 N71-15620	US-PATENT-3,509,469	c23 N71-16099
US-PATENT-3,491,857	c14 N71-17626	US-PATENT-3,509,475	c09 N71-24596
US-PATENT-3,492,176	c27 N71-14090	US-PATENT-3,509,491	c09 N71-18721
US-PATENT-3,492,672	c05 N71-12344	US-PATENT-3,509,551	c08 N71-18694
US-PATENT-3,492,739	c15 N71-15571	US-PATENT-3,509,558	c08 N71-19435
US-PATENT-3,492,862	c14 N71-15600	US-PATENT-3,509,570	c09 N71-18720
US-PATENT-3,492,947	c28 N71-14058	US-PATENT-3,509,578	c07 N71-19493
US-PATENT-3,493,003	c15 N71-15609	US-PATENT-3,512,009	c08 N71-18751
US-PATENT-3,493,004	c12 N71-17579	US-PATENT-3,516,091	c05 N71-24623
US-PATENT-3,493,012	c15 N71-15608	US-PATENT-3,516,179	c11 N71-19494
US-PATENT-3,493,027	c31 N71-18611	US-PATENT-3,516,185	c12 N71-18603
US-PATENT-3,493,153	c05 N71-12351	US-PATENT-3,516,284	c12 N71-17573
US-PATENT-3,493,155	c26 N71-14354	US-PATENT-3,516,404	c05 N71-17599
US-PATENT-3,493,194	c21 N71-14132	US-PATENT-3,516,711	c05 N71-12341
US-PATENT-3,493,197	c02 N71-11043	US-PATENT-3,516,879	c23 N71-16212
US-PATENT-3,493,291	c14 N71-15622	US-PATENT-3,516,964	c06 N71-11240
US-PATENT-3,493,294	c14 N71-15605	US-PATENT-3,516,970	c06 N71-11239
US-PATENT-3,493,401	c18 N71-14014	US-PATENT-3,516,971	c06 N71-24740
US-PATENT-3,493,415	c15 N71-15610	US-PATENT-3,517,109	c07 N71-19436
US-PATENT-3,493,437	c03 N71-11056	US-PATENT-3,517,162	c33 N71-16278
US-PATENT-3,493,522	c06 N71-11243	US-PATENT-3,517,171	c08 N71-24633
US-PATENT-3,493,524	c06 N71-11242	US-PATENT-3,517,221	c10 N71-19587
US-PATENT-3,493,665	c14 N71-15621	US-PATENT-3,517,268	c10 N71-19469
US-PATENT-3,493,677	c07 N71-11300	US-PATENT-3,517,302	c25 N71-16073
US-PATENT-3,493,711	c15 N71-14932	US-PATENT-3,517,318	c08 N71-19432
US-PATENT-3,493,746	c15 N71-15606	US-PATENT-3,517,328	c16 N71-18614
US-PATENT-3,493,797	c15 N71-17652	US-PATENT-3,518,232	c06 N71-11235
US-PATENT-3,493,805	c09 N71-12521	US-PATENT-3,520,190	c10 N71-13537
US-PATENT-3,493,901	c09 N71-12517	US-PATENT-3,520,238	c14 N71-18465
US-PATENT-3,493,929	c08 N71-12505	US-PATENT-3,520,317	c12 N71-17578
US-PATENT-3,493,942	c08 N71-12504	US-PATENT-3,520,496	c31 N71-16345
US-PATENT-3,495,260	c21 N71-13958	US-PATENT-3,520,503	c31 N71-16085
US-PATENT-3,495,262	c07 N71-12396	US-PATENT-3,520,617	c23 N71-16101
US-PATENT-3,500,020	c01 N71-13411	US-PATENT-3,520,660	c23 N71-16355
US-PATENT-3,500,525	c15 N71-17688	US-PATENT-3,521,054	c06 N71-13461
US-PATENT-3,500,677	c14 N71-17584	US-PATENT-3,521,143	c08 N71-18752
US-PATENT-3,500,686	c12 N71-17569	US-PATENT-3,521,290	c31 N71-16102
US-PATENT-3,500,688	c14 N71-17587	US-PATENT-3,523,228	c10 N71-24861
US-PATENT-3,500,747	c09 N71-18599	US-PATENT-3,526,030	c15 N71-17686
US-PATENT-3,500,827	c05 N71-11203	US-PATENT-3,526,134	c33 N71-16356
US-PATENT-3,501,112	c15 N71-17693	US-PATENT-3,526,139	c31 N71-16221
US-PATENT-3,501,632	c27 N71-16348	US-PATENT-3,526,140	c27 N71-16223
US-PATENT-3,501,641	c20 N71-16340	US-PATENT-3,526,359	c33 N71-16357
US-PATENT-3,501,648	c10 N71-24799	US-PATENT-3,526,365	c28 N71-16224
US-PATENT-3,501,649	c10 N71-18723	US-PATENT-3,526,372	c31 N71-16346
US-PATENT-3,501,664	c14 N71-17585	US-PATENT-3,526,382	c15 N71-17649
US-PATENT-3,501,683	c15 N71-17694	US-PATENT-3,526,460	c23 N71-16365
US-PATENT-3,501,684	c09 N71-26092	US-PATENT-3,526,473	c18 N71-15545
US-PATENT-3,501,701	c08 N71-18692	US-PATENT-3,526,580	c18 N71-16210
US-PATENT-3,501,704	c07 N71-11282	US-PATENT-3,526,611	c06 N71-11236
US-PATENT-3,501,712	c09 N71-19516	US-PATENT-3,526,845	c09 N71-13531
US-PATENT-3,501,743	c09 N71-18843	US-PATENT-3,526,897	c09 N71-13521
US-PATENT-3,501,750	c08 N71-19288	US-PATENT-3,529,480	c15 N71-17692
US-PATENT-3,501,752	c08 N71-18595	US-PATENT-3,529,928	c17 N71-16393
US-PATENT-3,501,764	c10 N71-18722	US-PATENT-3,530,336	c09 N71-13518
US-PATENT-3,502,051	c15 N71-17647	US-PATENT-3,531,964	c15 N71-18616
US-PATENT-3,502,074	c05 N71-11190	US-PATENT-3,531,978	c14 N71-18481
US-PATENT-3,502,141	c33 N71-16277	US-PATENT-3,531,982	c15 N71-18132
US-PATENT-3,503,251	c32 N71-16428	US-PATENT-3,531,989	c33 N71-15641
US-PATENT-3,504,258	c10 N71-18724	US-PATENT-3,532,118	c12 N71-18615
US-PATENT-3,504,983	c23 N71-16341	US-PATENT-3,532,128	c15 N71-18580
US-PATENT-3,507,034	c15 N71-17650	US-PATENT-3,532,427	c21 N71-19212
US-PATENT-3,507,114	c27 N71-16392	US-PATENT-3,532,428	c30 N71-15990
US-PATENT-3,507,146	c05 N71-11202	US-PATENT-3,532,538	c18 N71-16046
US-PATENT-3,507,150	c20 N71-16281	US-PATENT-3,532,551	c03 N71-11049
US-PATENT-3,507,425	c15 N71-17628	US-PATENT-3,532,568	c17 N71-16044
US-PATENT-3,507,436	c08 N71-19420	US-PATENT-3,532,673	c06 N71-11238
US-PATENT-3,507,704	c03 N71-11052	US-PATENT-3,532,807	c07 N71-19433
US-PATENT-3,507,706	c03 N71-18698	US-PATENT-3,532,819	c10 N71-19468
US-PATENT-3,508,036	c08 N71-18693	US-PATENT-3,532,866	c08 N71-18602
US-PATENT-3,508,039	c08 N71-19437	US-PATENT-3,532,880	c24 N71-16095
US-PATENT-3,508,053	c09 N71-18830	US-PATENT-3,532,894	c23 N71-16100
US-PATENT-3,508,070	c03 N71-11057	US-PATENT-3,532,948	c10 N71-18772
US-PATENT-3,508,152	c07 N71-11266	US-PATENT-3,532,960	c03 N71-12255

NUMBER INDEX

US-PATENT-3,532,973	c15 N71-17822	US-PATENT-3,541,361	c09 N71-24904
US-PATENT-3,532,975	c10 N71-19421	US-PATENT-3,541,422	c03 N71-24719
US-PATENT-3,532,979	c10 N71-12554	US-PATENT-3,541,428	c09 N71-24893
US-PATENT-3,532,985	c07 N71-19773	US-PATENT-3,541,439	c09 N71-24843
US-PATENT-3,533,CC1	c07 N71-24583	US-PATENT-3,541,450	c07 N71-24840
US-PATENT-3,533,006	c10 N72-28241	US-PATENT-3,541,459	c10 N71-24844
US-PATENT-3,533,074	c08 N71-12502	US-PATENT-3,541,479	c09 N71-24841
US-PATENT-3,533,053	c10 N71-19417	US-PATENT-3,541,486	c16 N71-28554
US-PATENT-3,533,058	c08 N71-18594	US-PATENT-3,541,679	c03 N71-24681
US-PATENT-3,534,365	c07 N71-19854	US-PATENT-3,541,825	c15 N71-24836
US-PATENT-3,534,367	c02 N71-19287	US-PATENT-3,541,875	c15 N71-24984
US-PATENT-3,534,375	c07 N71-11285	US-PATENT-3,543,050	c10 N71-24862
US-PATENT-3,534,376	c07 N71-26101	US-PATENT-3,543,159	c09 N71-24717
US-PATENT-3,534,406	c05 N71-11195	US-PATENT-3,545,208	c28 N71-25213
US-PATENT-3,534,407	c05 N71-11194	US-PATENT-3,545,226	c23 N71-24725
US-PATENT-3,534,479	c14 N71-17657	US-PATENT-3,545,252	c11 N71-24985
US-PATENT-3,534,480	c14 N71-17658	US-PATENT-3,545,262	c38 N76-28563
US-PATENT-3,534,485	c11 N71-18773	US-PATENT-3,545,275	c09 N71-24597
US-PATENT-3,534,555	c12 N71-17631	US-PATENT-3,545,725	c15 N71-24599
US-PATENT-3,534,584	c10 N71-13545	US-PATENT-3,545,792	c15 N71-24903
US-PATENT-3,534,585	c14 N71-17701	US-PATENT-3,546,386	c07 N71-24621
US-PATENT-3,534,552	c14 N71-17656	US-PATENT-3,546,471	c14 N71-24864
US-PATENT-3,534,596	c14 N71-17586	US-PATENT-3,546,552	c15 N71-24895
US-PATENT-3,534,557	c31 N71-15643	US-PATENT-3,546,553	c09 N71-24805
US-PATENT-3,534,650	c15 N71-17653	US-PATENT-3,546,684	c07 N71-24624
US-PATENT-3,534,686	c31 N71-15687	US-PATENT-3,546,694	c10 N71-24798
US-PATENT-3,534,727	c05 N71-11189	US-PATENT-3,546,705	c09 N71-24842
US-PATENT-3,534,765	c12 N71-17661	US-PATENT-3,546,917	c15 N71-24679
US-PATENT-3,534,826	c31 N71-15689	US-PATENT-3,546,920	c06 N71-24607
US-PATENT-3,534,836	c15 N71-17805	US-PATENT-3,546,931	c32 N71-25360
US-PATENT-3,534,909	c15 N71-17654	US-PATENT-3,547,105	c09 N71-24618
US-PATENT-3,534,924	c31 N71-15674	US-PATENT-3,547,376	c31 N71-25343
US-PATENT-3,534,925	c31 N71-15676	US-PATENT-3,547,540	c16 N71-24828
US-PATENT-3,534,926	c15 N71-19214	US-PATENT-3,547,801	c03 N71-24718
US-PATENT-3,534,930	c02 N71-13422	US-PATENT-3,548,107	c07 N71-24622
US-PATENT-3,535,012	c16 N71-15567	US-PATENT-3,548,633	c18 N71-24934
US-PATENT-3,535,013	c16 N71-15551	US-PATENT-3,548,636	c15 N71-24910
US-PATENT-3,535,014	c16 N71-15565	US-PATENT-3,548,812	c05 N71-24729
US-PATENT-3,535,024	c14 N71-17662	US-PATENT-3,548,930	c33 N71-25353
US-PATENT-3,535,041	c14 N71-17655	US-PATENT-3,549,435	c14 N72-28438
US-PATENT-3,535,110	c17 N71-15468	US-PATENT-3,549,564	c06 N71-24739
US-PATENT-3,535,130	c18 N71-15469	US-PATENT-3,549,799	c09 N71-25866
US-PATENT-3,535,165	c33 N71-15568	US-PATENT-3,549,882	c15 N71-24896
US-PATENT-3,535,179	c15 N71-17651	US-PATENT-3,549,955	c09 N71-24892
US-PATENT-3,535,352	c18 N71-15688	US-PATENT-3,550,023	c09 N71-24806
US-PATENT-3,535,446	c09 N71-12539	US-PATENT-3,550,034	c16 N71-24832
US-PATENT-3,535,451	c07 N71-11281	US-PATENT-3,550,129	c21 N71-24948
US-PATENT-3,535,457	c08 N71-24890	US-PATENT-3,550,585	c05 N71-24738
US-PATENT-3,535,543	c09 N71-13486	US-PATENT-3,551,266	c33 N71-24858
US-PATENT-3,535,547	c09 N71-12520	US-PATENT-3,551,816	c07 N71-24613
US-PATENT-3,535,554	c09 N71-12516	US-PATENT-3,551,831	c33 N75-27251
US-PATENT-3,535,560	c08 N71-12494	US-PATENT-3,552,124	c28 N71-26642
US-PATENT-3,535,562	c33 N71-27862	US-PATENT-3,552,125	c28 N71-26173
US-PATENT-3,535,570	c15 N71-24696	US-PATENT-3,553,002	c18 N71-26100
US-PATENT-3,535,586	c25 N71-15562	US-PATENT-3,553,586	c07 N71-26292
US-PATENT-3,535,602	c09 N71-13522	US-PATENT-3,553,704	c10 N71-26142
US-PATENT-3,535,642	c08 N71-12503	US-PATENT-3,553,904	c15 N71-26134
US-PATENT-3,535,644	c09 N71-12519	US-PATENT-3,554,466	c31 N71-26537
US-PATENT-3,535,657	c07 N71-12390	US-PATENT-3,554,647	c23 N71-26206
US-PATENT-3,535,658	c08 N71-12500	US-PATENT-3,554,806	c03 N71-26084
US-PATENT-3,535,683	c31 N71-15566	US-PATENT-3,555,192	c07 N71-26181
US-PATENT-3,535,656	c08 N71-12506	US-PATENT-3,555,361	c10 N71-26531
US-PATENT-3,535,702	c09 N71-12515	US-PATENT-3,555,455	c23 N71-26722
US-PATENT-3,536,1C3	c15 N71-19213	US-PATENT-3,555,483	c35 N77-21393
US-PATENT-3,537,096	c08 N71-12507	US-PATENT-3,555,867	c15 N71-26148
US-PATENT-3,537,103	c08 N71-24650	US-PATENT-3,555,898	c12 N71-26546
US-PATENT-3,537,107	c05 N71-24730	US-PATENT-3,556,048	c09 N71-26701
US-PATENT-3,537,305	c26 N71-25490	US-PATENT-3,556,634	c07 N71-26291
US-PATENT-3,537,515	c09 N71-24807	US-PATENT-3,557,027	c06 N71-25929
US-PATENT-3,537,668	c05 N71-24728	US-PATENT-3,557,534	c15 N71-26185
US-PATENT-3,537,672	c15 N71-24694	US-PATENT-3,559,031	c10 N71-26085
US-PATENT-3,539,905	c09 N71-24800	US-PATENT-3,559,096	c10 N71-25882
US-PATENT-3,540,045	c09 N71-24595	US-PATENT-3,559,460	c14 N71-26672
US-PATENT-3,540,048	c31 N71-24813	US-PATENT-3,559,937	c14 N71-26627
US-PATENT-3,540,650	c09 N71-24804	US-PATENT-3,560,081	c19 N71-26674
US-PATENT-3,540,054	c07 N71-24625	US-PATENT-3,560,161	c06 N71-26754
US-PATENT-3,540,056	c07 N71-24614	US-PATENT-3,561,828	c15 N71-26189
US-PATENT-3,540,250	c15 N71-24865	US-PATENT-3,562,575	c09 N71-26182
US-PATENT-3,540,449	c15 N71-24835	US-PATENT-3,562,631	c14 N71-26137
US-PATENT-3,540,615	c33 N71-25351	US-PATENT-3,562,857	c15 N71-26721
US-PATENT-3,540,676	c15 N71-24600	US-PATENT-3,562,881	c09 N71-26678
US-PATENT-3,540,750	c16 N71-26154	US-PATENT-3,562,919	c15 N71-26145
US-PATENT-3,540,802	c23 N71-24868	US-PATENT-3,563,135	c15 N71-27147
US-PATENT-3,540,942	c15 N71-24875	US-PATENT-3,563,198	c18 N71-26285
US-PATENT-3,540,989	c24 N71-25555	US-PATENT-3,563,232	c05 N71-27234
US-PATENT-3,541,250	c07 N71-24742	US-PATENT-3,563,307	c15 N71-26611
US-PATENT-3,541,312	c08 N71-24891	US-PATENT-3,563,668	c14 N71-26788
US-PATENT-3,541,314	c07 N71-24741	US-PATENT-3,563,727	c15 N71-27184
US-PATENT-3,541,346	c09 N71-24803	US-PATENT-3,563,918	c06 N71-27363

NUMBER INDEX

US-PATENT-3,564,234	.....	c09 N71-26787	US-PATENT-3,576,127	.....	c14 N71-26161
US-PATENT-3,564,401	.....	c14 N71-26135	US-PATENT-3,576,135	.....	c15 N71-26635
US-PATENT-3,564,420	.....	c14 N71-26774	US-PATENT-3,576,301	.....	c02 N71-26110
US-PATENT-3,564,564	.....	c15 N71-26162	US-PATENT-3,576,656	.....	c18 N71-26772
US-PATENT-3,564,866	.....	c23 N71-26654	US-PATENT-3,576,669	.....	c15 N71-29032
US-PATENT-3,564,906	.....	c32 N71-26681	US-PATENT-3,576,723	.....	c09 N71-28691
US-PATENT-3,565,530	.....	c15 N71-26673	US-PATENT-3,576,786	.....	c06 N71-28620
US-PATENT-3,565,584	.....	c15 N71-27372	US-PATENT-3,577,014	.....	c10 N71-28860
US-PATENT-3,565,607	.....	c17 N71-26773	US-PATENT-3,577,092	.....	c07 N71-28440
US-PATENT-3,565,719	.....	c03 N71-26726	US-PATENT-3,577,356	.....	c06 N73-30102
US-PATENT-3,566,C27	.....	c07 N71-27341	US-PATENT-3,578,755	.....	c14 N71-29134
US-PATENT-3,566,045	.....	c08 N71-27210	US-PATENT-3,578,756	.....	c11 N71-28629
US-PATENT-3,566,122	.....	c14 N71-27323	US-PATENT-3,578,758	.....	c14 N71-28992
US-PATENT-3,566,143	.....	c14 N71-27407	US-PATENT-3,578,838	.....	c16 N71-29131
US-PATENT-3,566,158	.....	c10 N71-27126	US-PATENT-3,578,867	.....	c14 N71-28994
US-PATENT-3,566,268	.....	c10 N71-26577	US-PATENT-3,578,957	.....	c08 N71-29033
US-PATENT-3,566,396	.....	c10 N71-26544	US-PATENT-3,578,988	.....	c09 N71-29139
US-PATENT-3,566,459	.....	c14 N71-27334	US-PATENT-3,578,992	.....	c09 N71-28421
US-PATENT-3,566,676	.....	c14 N71-26199	US-PATENT-3,579,041	.....	c09 N71-29008
US-PATENT-3,566,993	.....	c15 N71-27169	US-PATENT-3,579,103	.....	c14 N71-28991
US-PATENT-3,567,155	.....	c21 N71-27324	US-PATENT-3,579,122	.....	c08 N71-29034
US-PATENT-3,567,339	.....	c15 N71-27084	US-PATENT-3,579,146	.....	c08 N71-29138
US-PATENT-3,567,651	.....	c18 N71-27170	US-PATENT-3,579,147	.....	c07 N71-28429
US-PATENT-3,567,677	.....	c18 N71-25881	US-PATENT-3,579,168	.....	c09 N71-29035
US-PATENT-3,567,867	.....	c10 N71-25865	US-PATENT-3,579,242	.....	c07 N71-28980
US-PATENT-3,567,913	.....	c10 N71-27137	US-PATENT-3,579,390	.....	c18 N71-28729
US-PATENT-3,567,927	.....	c14 N71-28863	US-PATENT-3,579,412	.....	c17 N71-28747
US-PATENT-3,568,010	.....	c09 N71-27232	US-PATENT-3,581,492	.....	c28 N71-28915
US-PATENT-3,568,028	.....	c10 N71-27136	US-PATENT-3,582,828	.....	c33 N77-21314
US-PATENT-3,568,103	.....	c10 N71-25900	US-PATENT-3,582,960	.....	c09 N71-28618
US-PATENT-3,568,197	.....	c07 N71-27056	US-PATENT-3,583,058	.....	c15 N71-29018
US-PATENT-3,568,447	.....	c15 N71-27432	US-PATENT-3,583,239	.....	c15 N71-29132
US-PATENT-3,568,572	.....	c15 N71-27754	US-PATENT-3,583,322	.....	c05 N71-28619
US-PATENT-3,568,702	.....	c10 N71-25899	US-PATENT-3,583,419	.....	c12 N71-28741
US-PATENT-3,568,748	.....	c15 N71-27091	US-PATENT-3,583,744	.....	c15 N71-29133
US-PATENT-3,568,755	.....	c15 N71-27067	US-PATENT-3,583,777	.....	c15 N71-28465
US-PATENT-3,568,805	.....	c15 N71-27146	US-PATENT-3,583,815	.....	c15 N71-28740
US-PATENT-3,568,874	.....	c15 N71-27068	US-PATENT-3,584,311	.....	c09 N71-28468
US-PATENT-3,568,885	.....	c14 N71-27005	US-PATENT-3,584,660	.....	c15 N72-12408
US-PATENT-3,569,710	.....	c14 N71-25901	US-PATENT-3,585,514	.....	c10 N71-33129
US-PATENT-3,569,744	.....	c09 N71-27016	US-PATENT-3,585,882	.....	c15 N71-33518
US-PATENT-3,569,804	.....	c09 N71-25999	US-PATENT-3,586,261	.....	c31 N71-33160
US-PATENT-3,569,827	.....	c18 N71-27397	US-PATENT-3,587,306	.....	c11 N71-33612
US-PATENT-3,569,828	.....	c14 N71-27186	US-PATENT-3,587,424	.....	c16 N71-33410
US-PATENT-3,569,866	.....	c10 N71-27271	US-PATENT-3,588,220	.....	c23 N71-33229
US-PATENT-3,569,875	.....	c07 N71-27191	US-PATENT-3,588,331	.....	c07 N72-12081
US-PATENT-3,569,956	.....	c10 N71-25917	US-PATENT-3,588,359	.....	c07 N71-33108
US-PATENT-3,569,976	.....	c07 N71-27233	US-PATENT-3,588,483	.....	c08 N71-33110
US-PATENT-3,570,143	.....	c10 N71-27365	US-PATENT-3,588,648	.....	c07 N71-33613
US-PATENT-3,570,364	.....	c28 N71-26779	US-PATENT-3,588,671	.....	c09 N71-33109
US-PATENT-3,570,513	.....	c12 N71-27332	US-PATENT-3,588,705	.....	c07 N71-33696
US-PATENT-3,570,785	.....	c28 N71-27585	US-PATENT-3,588,751	.....	c07 N71-33606
US-PATENT-3,570,789	.....	c02 N71-27088	US-PATENT-3,588,874	.....	c09 N71-33519
US-PATENT-3,571,555	.....	c15 N71-27135	US-PATENT-3,588,883	.....	c10 N71-33407
US-PATENT-3,571,656	.....	c09 N71-27001	US-PATENT-3,591,420	.....	c03 N71-33409
US-PATENT-3,571,662	.....	c10 N71-27366	US-PATENT-3,591,426	.....	c17 N71-33408
US-PATENT-3,571,693	.....	c09 N71-27364	US-PATENT-3,591,885	.....	c15 N72-11390
US-PATENT-3,571,699	.....	c09 N71-27053	US-PATENT-3,591,960	.....	c15 N72-12409
US-PATENT-3,571,700	.....	c14 N71-27325	US-PATENT-3,591,967	.....	c28 N72-11709
US-PATENT-3,571,707	.....	c10 N71-27338	US-PATENT-3,592,422	.....	c15 N72-11391
US-PATENT-3,571,800	.....	c10 N71-27272	US-PATENT-3,592,478	.....	c09 N72-11224
US-PATENT-3,571,801	.....	c08 N71-27255	US-PATENT-3,592,505	.....	c05 N72-11085
US-PATENT-3,572,089	.....	c14 N71-27185	US-PATENT-3,592,545	.....	c14 N72-11364
US-PATENT-3,572,104	.....	c28 N71-27094	US-PATENT-3,592,559	.....	c02 N72-11018
US-PATENT-3,572,112	.....	c15 N71-27006	US-PATENT-3,592,628	.....	c15 N72-11387
US-PATENT-3,572,610	.....	c28 N71-27095	US-PATENT-3,592,768	.....	c15 N72-11389
US-PATENT-3,572,935	.....	c14 N71-27215	US-PATENT-3,593,001	.....	c15 N72-11392
US-PATENT-3,573,583	.....	c09 N71-28886	US-PATENT-3,593,024	.....	c24 N72-11595
US-PATENT-3,573,757	.....	c08 N71-27057	US-PATENT-3,593,132	.....	c09 N72-11225
US-PATENT-3,573,977	.....	c15 N71-28582	US-PATENT-3,593,138	.....	c07 N72-11149
US-PATENT-3,573,986	.....	c03 N71-28579	US-PATENT-3,593,175	.....	c10 N72-11256
US-PATENT-3,573,956	.....	c18 N71-29040	US-PATENT-3,593,180	.....	c07 N72-11150
US-PATENT-3,574,057	.....	c22 N71-28759	US-PATENT-3,593,194	.....	c16 N72-12440
US-PATENT-3,574,084	.....	c14 N71-28933	US-PATENT-3,594,790	.....	c07 N72-12080
US-PATENT-3,574,277	.....	c15 N71-28467	US-PATENT-3,594,803	.....	c09 N72-12136
US-PATENT-3,574,286	.....	c11 N71-27036	US-PATENT-3,596,465	.....	c28 N72-11708
US-PATENT-3,574,438	.....	c07 N71-29065	US-PATENT-3,596,510	.....	c14 N72-11363
US-PATENT-3,574,448	.....	c23 N71-29123	US-PATENT-3,596,554	.....	c15 N72-11385
US-PATENT-3,574,462	.....	c14 N71-29041	US-PATENT-3,596,863	.....	c15 N72-11386
US-PATENT-3,574,467	.....	c23 N71-29125	US-PATENT-3,597,281	.....	c03 N72-11062
US-PATENT-3,574,470	.....	c14 N71-28993	US-PATENT-3,598,921	.....	c08 N72-11171
US-PATENT-3,574,770	.....	c06 N71-27254	US-PATENT-3,599,216	.....	c07 N72-11148
US-PATENT-3,575,336	.....	c15 N71-27214	US-PATENT-3,599,335	.....	c08 N72-11172
US-PATENT-3,575,585	.....	c14 N71-27058	US-PATENT-3,599,443	.....	c05 N72-11084
US-PATENT-3,575,557	.....	c14 N71-27090	US-PATENT-3,599,489	.....	c14 N72-11365
US-PATENT-3,575,602	.....	c16 N71-27183	US-PATENT-3,600,046	.....	c15 N72-11388
US-PATENT-3,575,638	.....	c09 N71-26133	US-PATENT-3,602,920	.....	c11 N72-17183
US-PATENT-3,575,641	.....	c10 N71-26334	US-PATENT-3,602,923	.....	c05 N72-22093
US-PATENT-3,576,107	.....	c28 N71-26781	US-PATENT-3,602,979	.....	c15 N72-22492

NUMBER INDEX

US-PATENT-3, 602, 984	c26 N72-17820	US-PATENT-3, 620, 585	c15 N72-22490
US-PATENT-3, 603, 052	c28 N72-17843	US-PATENT-3, 620, 595	c14 N72-22445
US-PATENT-3, 603, 053	c28 N72-18766	US-PATENT-3, 620, 606	c23 N72-22673
US-PATENT-3, 603, 260	c33 N72-17947	US-PATENT-3, 620, 718	c17 N72-22535
US-PATENT-3, 603, 285	c25 N75-29192	US-PATENT-3, 620, 784	c18 N72-23581
US-PATENT-3, 603, 382	c33 N72-17948	US-PATENT-3, 620, 791	c18 N72-22566
US-PATENT-3, 603, 433	c15 N72-17450	US-PATENT-3, 620, 846	c31 N72-22874
US-PATENT-3, 603, 532	c30 N72-17873	US-PATENT-3, 621, 130	c08 N72-22164
US-PATENT-3, 603, 663	c14 N72-17326	US-PATENT-3, 621, 153	c15 N72-23497
US-PATENT-3, 603, 666	c16 N72-13437	US-PATENT-3, 621, 194	c15 N72-22491
US-PATENT-3, 603, 690	c14 N72-17323	US-PATENT-3, 621, 228	c08 N72-22165
US-PATENT-3, 603, 722	c07 N72-17109	US-PATENT-3, 621, 277	c10 N72-22236
US-PATENT-3, 603, 772	c08 N72-22166	US-PATENT-3, 621, 285	c09 N72-22200
US-PATENT-3, 603, 798	c09 N72-17152	US-PATENT-3, 621, 287	c09 N72-22201
US-PATENT-3, 603, 864	c09 N72-17154	US-PATENT-3, 621, 290	c09 N72-22202
US-PATENT-3, 603, 892	c09 N72-17155	US-PATENT-3, 621, 294	c09 N72-23171
US-PATENT-3, 603, 946	c09 N72-17153	US-PATENT-3, 621, 330	c33 N77-21316
US-PATENT-3, 603, 974	c14 N72-18411	US-PATENT-3, 621, 362	c09 N72-22203
US-PATENT-3, 603, 976	c08 N72-18184	US-PATENT-3, 621, 372	c09 N72-25249
US-PATENT-3, 605, 032	c10 N72-17172	US-PATENT-3, 621, 406	c09 N72-33204
US-PATENT-3, 605, 424	c15 N72-17453	US-PATENT-3, 621, 407	c09 N72-21245
US-PATENT-3, 605, 482	c14 N72-16282	US-PATENT-3, 621, 565	c09 N72-22199
US-PATENT-3, 605, 455	c14 N72-17327	US-PATENT-3, 623, 030	c08 N72-21198
US-PATENT-3, 605, 519	c14 N72-17324	US-PATENT-3, 623, 094	c10 N72-22235
US-PATENT-3, 606, 212	c31 N72-18859	US-PATENT-3, 623, 107	c07 N72-21117
US-PATENT-3, 606, 470	c46 N74-23068	US-PATENT-3, 623, 114	c07 N72-22127
US-PATENT-3, 606, 522	c23 N72-23695	US-PATENT-3, 623, 359	c35 N77-27367
US-PATENT-3, 606, 979	c15 N72-17454	US-PATENT-3, 623, 360	c14 N72-21405
US-PATENT-3, 607, 015	c06 N72-17093	US-PATENT-3, 623, 361	c14 N72-21407
US-PATENT-3, 607, 076	c06 N72-17094	US-PATENT-3, 623, 394	c15 N72-22488
US-PATENT-3, 607, 080	c06 N72-17095	US-PATENT-3, 623, 828	c15 N72-22489
US-PATENT-3, 607, 338	c18 N72-17532	US-PATENT-3, 623, 861	c17 N72-22530
US-PATENT-3, 607, 401	c03 N72-15986	US-PATENT-3, 624, 496	c15 N72-21464
US-PATENT-3, 607, 455	c15 N72-16330	US-PATENT-3, 624, 558	c21 N72-22619
US-PATENT-3, 608, 046	c15 N72-16329	US-PATENT-3, 624, 650	c07 N72-21118
US-PATENT-3, 608, 365	c15 N72-17452	US-PATENT-3, 624, 659	c09 N72-21246
US-PATENT-3, 608, 409	c14 N72-16283	US-PATENT-3, 624, 639	c05 N72-20098
US-PATENT-3, 608, 844	c15 N72-18477	US-PATENT-3, 625, 018	c15 N72-22484
US-PATENT-3, 609, 230	c09 N72-17156	US-PATENT-3, 625, 084	c15 N72-22485
US-PATENT-3, 609, 271	c09 N72-22204	US-PATENT-3, 625, 766	c03 N72-20032
US-PATENT-3, 609, 327	c08 N72-22167	US-PATENT-3, 626, 189	c14 N72-20381
US-PATENT-3, 609, 353	c14 N72-17328	US-PATENT-3, 626, 218	c14 N72-22439
US-PATENT-3, 609, 364	c10 N72-17173	US-PATENT-3, 626, 258	c07 N72-20140
US-PATENT-3, 609, 387	c09 N72-17157	US-PATENT-3, 626, 308	c10 N72-20223
US-PATENT-3, 609, 535	c14 N72-17325	US-PATENT-3, 626, 828	c14 N72-20380
US-PATENT-3, 609, 567	c10 N72-17171	US-PATENT-3, 628, 113	c37 N77-27400
US-PATENT-3, 609, 740	c05 N72-16015	US-PATENT-3, 629, 068	c22 N72-20597
US-PATENT-3, 610, 365	c15 N72-17451	US-PATENT-3, 629, 161	c18 N72-22567
US-PATENT-3, 611, 274	c15 N72-17455	US-PATENT-3, 630, 276	c33 N72-20915
US-PATENT-3, 611, 330	c23 N72-17747	US-PATENT-3, 630, 304	c11 N72-20244
US-PATENT-3, 611, 758	c14 N72-22437	US-PATENT-3, 630, 627	c03 N72-20033
US-PATENT-3, 611, 801	c14 N72-17329	US-PATENT-3, 631, 339	c08 N72-20177
US-PATENT-3, 612, 030	c46 N74-23069	US-PATENT-3, 631, 351	c10 N72-20224
US-PATENT-3, 612, 351	c11 N72-22245	US-PATENT-3, 631, 382	c09 N72-20200
US-PATENT-3, 612, 442	c28 N72-22769	US-PATENT-3, 631, 737	c15 N72-28495
US-PATENT-3, 612, 645	c14 N72-22441	US-PATENT-3, 632, 081	c15 N72-20442
US-PATENT-3, 612, 743	c09 N72-22198	US-PATENT-3, 632, 140	c15 N72-20445
US-PATENT-3, 612, 855	c09 N72-22197	US-PATENT-3, 632, 242	c15 N72-20446
US-PATENT-3, 613, 110	c08 N72-21199	US-PATENT-3, 632, 923	c09 N72-20199
US-PATENT-3, 613, 111	c08 N72-21200	US-PATENT-3, 632, 996	c08 N72-20176
US-PATENT-3, 613, 370	c28 N72-22770	US-PATENT-3, 633, 048	c10 N72-20221
US-PATENT-3, 613, 454	c35 N77-27368	US-PATENT-3, 633, 110	c07 N72-20141
US-PATENT-3, 613, 457	c15 N72-22482	US-PATENT-3, 634, 383	c27 N73-22710
US-PATENT-3, 613, 754	c12 N72-21310	US-PATENT-3, 635, 216	c05 N72-20096
US-PATENT-3, 614, 228	c14 N72-21409	US-PATENT-3, 635, 573	c37 N77-22478
US-PATENT-3, 614, 327	c08 N72-22162	US-PATENT-3, 635, 765	c03 N72-20034
US-PATENT-3, 614, 343	c07 N72-21119	US-PATENT-3, 636, 539	c03 N72-20031
US-PATENT-3, 614, 431	c14 N72-21408	US-PATENT-3, 636, 564	c05 N72-22092
US-PATENT-3, 614, 475	c10 N72-16172	US-PATENT-3, 636, 623	c15 N72-20444
US-PATENT-3, 614, 557	c26 N72-17701	US-PATENT-3, 636, 711	c28 N72-20758
US-PATENT-3, 614, 587	c09 N72-22196	US-PATENT-3, 636, 966	c05 N72-20097
US-PATENT-3, 614, 648	c09 N72-21247	US-PATENT-3, 637, 051	c15 N72-20443
US-PATENT-3, 614, 772	c08 N72-22163	US-PATENT-3, 637, 170	c21 N72-21624
US-PATENT-3, 614, 858	c15 N72-21462	US-PATENT-3, 637, 312	c14 N72-20379
US-PATENT-3, 614, 859	c09 N72-22195	US-PATENT-3, 637, 842	c06 N72-20121
US-PATENT-3, 615, 021	c15 N72-22483	US-PATENT-3, 638, 002	c08 N72-21197
US-PATENT-3, 615, 241	c15 N72-21465	US-PATENT-3, 638, 066	c10 N72-20225
US-PATENT-3, 615, 465	c06 N72-21094	US-PATENT-3, 638, 103	c09 N72-21243
US-PATENT-3, 615, 853	c03 N72-22042	US-PATENT-3, 638, 114	c10 N72-20222
US-PATENT-3, 616, 338	c15 N72-21466	US-PATENT-3, 638, 224	c09 N72-21244
US-PATENT-3, 616, 528	c03 N72-22041	US-PATENT-3, 639, 250	c14 N72-22443
US-PATENT-3, 617, 804	c25 N72-24753	US-PATENT-3, 639, 510	c06 N72-22107
US-PATENT-3, 618, 856	c15 N72-22487	US-PATENT-3, 639, 809	c15 N72-22486
US-PATENT-3, 619, 924	c11 N72-22247	US-PATENT-3, 639, 835	c14 N72-22442
US-PATENT-3, 620, 018	c28 N72-22771	US-PATENT-3, 640, 256	c28 N72-22772
US-PATENT-3, 620, 069	c14 N72-22440	US-PATENT-3, 647, 276	c14 N72-22444
US-PATENT-3, 620, 076	c11 N72-22246	US-PATENT-3, 647, 529	c27 N74-23125
US-PATENT-3, 620, 083	c14 N72-22438	US-PATENT-3, 647, 924	c11 N72-23215
US-PATENT-3, 620, 055	c15 N72-21463	US-PATENT-3, 648, 043	c09 N72-23173

NUMBER INDEX

US-PATENT-3,648,083	.....	c12 N72-25292	US-PATENT-3,669,110	.....	c05 N72-27103
US-PATENT-3,648,152	.....	c03 N72-23048	US-PATENT-3,669,393	.....	c15 N72-27488
US-PATENT-3,648,209	.....	c09 N72-27226	US-PATENT-3,670,097	.....	c23 N72-27728
US-PATENT-3,648,250	.....	c09 N72-25248	US-PATENT-3,670,168	.....	c14 N72-27409
US-PATENT-3,648,256	.....	c08 N72-25207	US-PATENT-3,670,202	.....	c14 N72-27411
US-PATENT-3,648,275	.....	c08 N72-25206	US-PATENT-3,670,241	.....	c14 N72-27408
US-PATENT-3,648,461	.....	c28 N72-23810	US-PATENT-3,670,290	.....	c09 N72-28225
US-PATENT-3,648,516	.....	c35 N74-22095	US-PATENT-3,670,559	.....	c33 N72-27959
US-PATENT-3,648,542	.....	c15 N72-25448	US-PATENT-3,670,563	.....	c14 N72-27412
US-PATENT-3,648,553	.....	c26 N72-28762	US-PATENT-3,670,564	.....	c11 N72-27262
US-PATENT-3,648,556	.....	c15 N72-25447	US-PATENT-3,670,890	.....	c05 N72-27102
US-PATENT-3,649,462	.....	c11 N72-25284	US-PATENT-3,671,105	.....	c26 N72-27784
US-PATENT-3,649,907	.....	c09 N72-23172	US-PATENT-3,671,329	.....	c14 N72-27410
US-PATENT-3,649,921	.....	c05 N72-23085	US-PATENT-3,671,497	.....	c06 N72-27144
US-PATENT-3,649,935	.....	c07 N72-25170	US-PATENT-3,671,798	.....	c10 N72-27246
US-PATENT-3,650,095	.....	c14 N72-23457	US-PATENT-3,672,999	.....	c03 N72-27053
US-PATENT-3,650,474	.....	c28 N72-23809	US-PATENT-3,673,424	.....	c09 N72-27227
US-PATENT-3,653,052	.....	c09 N72-25247	US-PATENT-3,673,440	.....	c09 N72-27228
US-PATENT-3,653,882	.....	c18 N72-25539	US-PATENT-3,675,332	.....	c14 N72-28436
US-PATENT-3,653,570	.....	c03 N72-24037	US-PATENT-3,675,376	.....	c15 N72-28496
US-PATENT-3,654,036	.....	c03 N72-25019	US-PATENT-3,675,712	.....	c03 N72-28025
US-PATENT-3,656,313	.....	c23 N72-25619	US-PATENT-3,675,910	.....	c17 N72-28535
US-PATENT-3,656,317	.....	c33 N72-25911	US-PATENT-3,675,935	.....	c15 N72-29488
US-PATENT-3,656,352	.....	c14 N72-25411	US-PATENT-3,676,084	.....	c17 N72-28536
US-PATENT-3,656,761	.....	c15 N72-25450	US-PATENT-3,676,674	.....	c14 N72-29464
US-PATENT-3,657,549	.....	c14 N72-25409	US-PATENT-3,676,754	.....	c26 N72-28761
US-PATENT-3,657,644	.....	c14 N72-24477	US-PATENT-3,676,772	.....	c10 N72-28240
US-PATENT-3,657,928	.....	c14 N72-25410	US-PATENT-3,676,787	.....	c16 N72-28521
US-PATENT-3,658,295	.....	c15 N72-25451	US-PATENT-3,676,809	.....	c09 N72-29172
US-PATENT-3,658,569	.....	c15 N72-25452	US-PATENT-3,678,191	.....	c10 N72-31273
US-PATENT-3,658,608	.....	c27 N72-25699	US-PATENT-3,678,654	.....	c06 N72-31140
US-PATENT-3,658,974	.....	c15 N72-24522	US-PATENT-3,678,685	.....	c21 N72-31637
US-PATENT-3,659,043	.....	c14 N72-25412	US-PATENT-3,678,771	.....	c37 N74-23070
US-PATENT-3,659,053	.....	c08 N72-25208	US-PATENT-3,679,360	.....	c04 N72-33072
US-PATENT-3,659,148	.....	c09 N72-25250	US-PATENT-3,679,899	.....	c06 N72-31141
US-PATENT-3,659,164	.....	c09 N72-25251	US-PATENT-3,680,142	.....	c09 N72-31235
US-PATENT-3,659,225	.....	c16 N72-25485	US-PATENT-3,680,144	.....	c07 N72-32169
US-PATENT-3,659,292	.....	c08 N72-25209	US-PATENT-3,680,830	.....	c15 N72-31483
US-PATENT-3,660,240	.....	c06 N72-25149	US-PATENT-3,681,581	.....	c08 N72-31226
US-PATENT-3,660,434	.....	c06 N72-25148	US-PATENT-3,686,542	.....	c14 N72-31446
US-PATENT-3,660,704	.....	c15 N72-25456	US-PATENT-3,690,291	.....	c15 N72-32487
US-PATENT-3,660,851	.....	c05 N72-25119	US-PATENT-3,692,533	.....	c05 N72-33096
US-PATENT-3,662,337	.....	c08 N72-25210	US-PATENT-3,693,002	.....	c25 N72-32688
US-PATENT-3,662,441	.....	c05 N72-25121	US-PATENT-3,693,105	.....	c10 N72-33230
US-PATENT-3,662,547	.....	c15 N72-25455	US-PATENT-3,693,346	.....	c15 N72-33477
US-PATENT-3,662,604	.....	c13 N72-25323	US-PATENT-3,693,418	.....	c14 N72-33377
US-PATENT-3,662,661	.....	c31 N72-25842	US-PATENT-3,694,041	.....	c15 N72-33476
US-PATENT-3,662,744	.....	c05 N72-25122	US-PATENT-3,694,094	.....	c14 N72-32452
US-PATENT-3,662,973	.....	c21 N72-25595	US-PATENT-3,694,313	.....	c24 N72-33681
US-PATENT-3,663,346	.....	c18 N72-25541	US-PATENT-3,694,581	.....	c08 N72-33172
US-PATENT-3,663,347	.....	c18 N72-25540	US-PATENT-3,694,655	.....	c25 N72-33696
US-PATENT-3,663,464	.....	c06 N72-25147	US-PATENT-3,694,700	.....	c09 N72-33205
US-PATENT-3,663,521	.....	c06 N72-25152	US-PATENT-3,694,753	.....	c07 N72-33146
US-PATENT-3,663,753	.....	c14 N72-25414	US-PATENT-3,694,771	.....	c09 N73-15235
US-PATENT-3,663,828	.....	c09 N72-25262	US-PATENT-3,695,101	.....	c11 N73-12264
US-PATENT-3,663,829	.....	c09 N72-25260	US-PATENT-3,696,418	.....	c09 N73-12211
US-PATENT-3,663,843	.....	c09 N72-25255	US-PATENT-3,696,833	.....	c11 N73-12265
US-PATENT-3,663,885	.....	c09 N72-25257	US-PATENT-3,697,021	.....	c15 N73-12486
US-PATENT-3,663,866	.....	c09 N72-25258	US-PATENT-3,697,630	.....	c15 N73-12489
US-PATENT-3,663,929	.....	c09 N72-25256	US-PATENT-3,697,705	.....	c35 N77-21392
US-PATENT-3,663,938	.....	c03 N72-25020	US-PATENT-3,697,733	.....	c08 N73-12176
US-PATENT-3,663,940	.....	c09 N72-25252	US-PATENT-3,697,950	.....	c08 N73-12177
US-PATENT-3,663,941	.....	c09 N72-25253	US-PATENT-3,697,968	.....	c21 N73-13644
US-PATENT-3,663,944	.....	c09 N72-25254	US-PATENT-3,698,385	.....	c05 N73-13114
US-PATENT-3,664,185	.....	c15 N72-26371	US-PATENT-3,698,412	.....	c14 N73-13418
US-PATENT-3,664,874	.....	c09 N72-25259	US-PATENT-3,698,659	.....	c11 N73-13257
US-PATENT-3,665,064	.....	c05 N72-25120	US-PATENT-3,698,667	.....	c02 N73-13008
US-PATENT-3,665,307	.....	c15 N72-25457	US-PATENT-3,698,848	.....	c15 N73-13464
US-PATENT-3,665,313	.....	c07 N72-25173	US-PATENT-3,699,511	.....	c21 N73-13643
US-PATENT-3,665,417	.....	c07 N72-25172	US-PATENT-3,699,645	.....	c14 N73-13417
US-PATENT-3,665,467	.....	c14 N72-28437	US-PATENT-3,699,799	.....	c15 N73-13463
US-PATENT-3,665,461	.....	c07 N72-25174	US-PATENT-3,699,807	.....	c14 N73-13416
US-PATENT-3,665,589	.....	c09 N72-25261	US-PATENT-3,699,811	.....	c14 N73-13415
US-PATENT-3,665,669	.....	c15 N72-25454	US-PATENT-3,700,005	.....	c15 N73-13462
US-PATENT-3,665,670	.....	c11 N72-25287	US-PATENT-3,700,192	.....	c31 N73-13898
US-PATENT-3,665,750	.....	c33 N72-25913	US-PATENT-3,700,193	.....	c30 N73-12884
US-PATENT-3,665,751	.....	c32 N72-25877	US-PATENT-3,700,291	.....	c15 N73-12488
US-PATENT-3,665,758	.....	c11 N72-25288	US-PATENT-3,700,334	.....	c14 N73-12446
US-PATENT-3,666,051	.....	c15 N72-25453	US-PATENT-3,700,503	.....	c14 N73-12447
US-PATENT-3,666,120	.....	c03 N72-25021	US-PATENT-3,700,538	.....	c18 N73-12604
US-PATENT-3,666,566	.....	c03 N72-26031	US-PATENT-3,700,575	.....	c15 N73-12487
US-PATENT-3,666,631	.....	c14 N72-25413	US-PATENT-3,700,603	.....	c14 N73-14428
US-PATENT-3,666,718	.....	c06 N72-25151	US-PATENT-3,700,812	.....	c10 N73-12244
US-PATENT-3,666,741	.....	c06 N72-25150	US-PATENT-3,700,868	.....	c09 N73-13209
US-PATENT-3,666,942	.....	c06 N72-25146	US-PATENT-3,700,869	.....	c08 N73-12175
US-PATENT-3,667,010	.....	c26 N72-25679	US-PATENT-3,700,893	.....	c14 N73-12444
US-PATENT-3,667,039	.....	c26 N72-25680	US-PATENT-3,700,897	.....	c14 N73-12445
US-PATENT-3,667,044	.....	c07 N72-25171	US-PATENT-3,700,961	.....	c23 N73-13660
US-PATENT-3,668,556	.....	c15 N72-27485	US-PATENT-3,701,631	.....	c17 N73-12547

NUMBER INDEX

US-PATENT-3,701,894	c07 N73-13149	US-PATENT-3,733,350	c06 N73-26100
US-PATENT-3,702-751	c15 N73-13465	US-PATENT-3,733,424	c32 N73-26910
US-PATENT-3,702,463	c08 N73-13187	US-PATENT-3,733,463	c14 N73-26430
US-PATENT-3,702,520	c32 N73-13921	US-PATENT-3,734,432	c02 N73-26004
US-PATENT-3,702,532	c15 N73-13467	US-PATENT-3,735,206	c10 N73-25243
US-PATENT-3,702,536	c28 N73-13773	US-PATENT-3,735,591	c25 N73-25760
US-PATENT-3,702,575	c15 N73-13466	US-PATENT-3,736,453	c33 N77-22386
US-PATENT-3,702,688	c31 N73-14854	US-PATENT-3,736,607	c02 N73-26006
US-PATENT-3,702,735	c23 N73-13661	US-PATENT-3,736,764	c05 N73-26071
US-PATENT-3,702,762	c06 N73-13129	US-PATENT-3,736,849	c14 N73-26431
US-PATENT-3,702,775	c06 N73-13128	US-PATENT-3,736,938	c05 N73-27062
US-PATENT-3,702,841	c18 N73-13562	US-PATENT-3,736,956	c15 N73-26472
US-PATENT-3,702,858	c10 N73-13235	US-PATENT-3,737,117	c31 N73-26876
US-PATENT-3,702,933	c23 N73-13662	US-PATENT-3,737,118	c15 N73-25514
US-PATENT-3,702,951	c09 N73-13208	US-PATENT-3,737,121	c02 N73-26005
US-PATENT-3,702,972	c16 N73-13489	US-PATENT-3,737,121	c05 N76-29217
US-PATENT-3,702,979	c14 N73-13420	US-PATENT-3,737,181	c33 N73-26958
US-PATENT-3,704,659	c14 N73-14427	US-PATENT-3,737,214	c52 N76-30793
US-PATENT-3,705,255	c15 N73-14469	US-PATENT-3,737,217	c05 N73-26072
US-PATENT-3,705,316	c09 N73-14214	US-PATENT-3,737,231	c07 N73-26119
US-PATENT-3,705,406	c07 N73-14130	US-PATENT-3,737,237	c26 N73-26751
US-PATENT-3,706,221	c14 N73-14429	US-PATENT-3,737,639	c10 N73-26230
US-PATENT-3,706,230	c31 N73-14855	US-PATENT-3,737,676	c10 N73-26229
US-PATENT-3,706,281	c31 N73-14853	US-PATENT-3,737,757	c10 N73-26228
US-PATENT-3,706,583	c18 N73-14584	US-PATENT-3,737,762	c14 N73-28486
US-PATENT-3,706,970	c21 N73-14692	US-PATENT-3,737,776	c07 N73-26118
US-PATENT-3,708,359	c27 N73-16764	US-PATENT-3,737,781	c10 N73-25241
US-PATENT-3,708,419	c33 N73-16918	US-PATENT-3,737,815	c09 N73-26195
US-PATENT-3,708,671	c14 N73-16483	US-PATENT-3,737,824	c26 N73-26752
US-PATENT-3,708,674	c14 N73-16484	US-PATENT-3,737,905	c14 N73-26432
US-PATENT-3,709,663	c06 N73-16106	US-PATENT-3,737,912	c07 N73-26117
US-PATENT-3,710,122	c16 N73-16536	US-PATENT-3,739,646	c04 N76-26175
US-PATENT-3,710,257	c07 N73-16121	US-PATENT-3,740,671	c10 N73-27171
US-PATENT-3,710,261	c10 N73-16205	US-PATENT-3,740,725	c08 N73-26176
US-PATENT-3,710,329	c10 N73-16206	US-PATENT-3,741,001	c14 N73-27376
US-PATENT-3,711,042	c02 N73-19004	US-PATENT-3,742,316	c09 N73-27150
US-PATENT-3,711,701	c74 N77-21941	US-PATENT-3,744,128	c09 N73-28083
US-PATENT-3,712,120	c14 N73-19421	US-PATENT-3,744,148	c14 N73-28489
US-PATENT-3,712,121	c14 N73-19420	US-PATENT-3,744,247	c28 N73-27699
US-PATENT-3,712,132	c14 N73-20478	US-PATENT-3,744,294	c14 N73-27379
US-PATENT-3,712,195	c14 N73-19419	US-PATENT-3,744,305	c12 N73-28144
US-PATENT-3,712,551	c15 N73-19458	US-PATENT-3,744,480	c05 N73-27941
US-PATENT-3,713,163	c09 N73-19234	US-PATENT-3,744,510	c15 N73-27406
US-PATENT-3,713,250	c28 N73-19793	US-PATENT-3,744,738	c14 N73-27378
US-PATENT-3,713,480	c05 N73-20137	US-PATENT-3,744,739	c15 N77-10112
US-PATENT-3,713,587	c15 N73-20514	US-PATENT-3,744,794	c14 N73-27377
US-PATENT-3,714,332	c15 N73-19457	US-PATENT-3,744,912	c16 N73-30476
US-PATENT-3,714,405	c10 N73-20253	US-PATENT-3,744,913	c14 N73-28490
US-PATENT-3,714,432	c14 N73-20475	US-PATENT-3,744,972	c17 N73-27446
US-PATENT-3,714,526	c09 N73-19235	US-PATENT-3,745,082	c18 N73-30532
US-PATENT-3,714,588	c09 N73-20231	US-PATENT-3,745,089	c06 N73-27086
US-PATENT-3,714,624	c14 N73-20474	US-PATENT-3,745,090	c04 N73-27052
US-PATENT-3,714,645	c08 N73-20217	US-PATENT-3,745,149	c06 N73-27980
US-PATENT-3,714,821	c14 N73-20476	US-PATENT-3,745,255	c07 N73-28012
US-PATENT-3,714,833	c11 N73-20267	US-PATENT-3,745,300	c15 N73-28515
US-PATENT-3,715,052	c03 N73-20039	US-PATENT-3,745,352	c08 N73-30135
US-PATENT-3,715,152	c23 N73-20741	US-PATENT-3,745,357	c14 N73-28488
US-PATENT-3,715,590	c14 N73-20477	US-PATENT-3,745,410	c09 N73-30181
US-PATENT-3,715,600	c03 N73-20040	US-PATENT-3,745,475	c14 N73-30386
US-PATENT-3,715,660	c07 N73-20175	US-PATENT-3,745,739	c15 N73-27405
US-PATENT-3,715,663	c07 N73-20174	US-PATENT-3,745,816	c33 N73-27796
US-PATENT-3,715,693	c09 N73-20232	US-PATENT-3,746,958	c07 N73-30113
US-PATENT-3,715,723	c07 N73-20176	US-PATENT-3,747,111	c07 N73-28013
US-PATENT-3,715,915	c32 N73-20740	US-PATENT-3,748,722	c15 N73-33383
US-PATENT-3,718,863	c10 N73-20254	US-PATENT-3,748,853	c23 N73-30665
US-PATENT-3,718,851	c07 N73-25160	US-PATENT-3,748,905	c14 N73-30395
US-PATENT-3,720,075	c33 N73-25952	US-PATENT-3,749,123	c15 N73-30459
US-PATENT-3,720,208	c05 N73-25125	US-PATENT-3,749,156	c31 N73-30829
US-PATENT-3,723,475	c14 N73-25462	US-PATENT-3,749,205	c15 N73-30460
US-PATENT-3,728,861	c28 N73-24783	US-PATENT-3,749,332	c31 N73-32750
US-PATENT-3,729,668	c15 N73-25512	US-PATENT-3,749,362	c15 N73-30457
US-PATENT-3,729,129	c08 N73-25206	US-PATENT-3,749,831	c07 N73-30115
US-PATENT-3,729,260	c14 N73-25463	US-PATENT-3,749,911	c14 N73-30389
US-PATENT-3,729,343	c14 N73-24472	US-PATENT-3,750,016	c14 N73-30388
US-PATENT-3,729,343	c35 N76-15434	US-PATENT-3,750,035	c33 N77-13315
US-PATENT-3,729,676	c14 N73-24473	US-PATENT-3,750,067	c09 N73-30185
US-PATENT-3,729,736	c07 N73-25161	US-PATENT-3,750,131	c10 N73-30205
US-PATENT-3,729,743	c07 N73-24176	US-PATENT-3,750,168	c21 N73-30641
US-PATENT-3,729,535	c28 N73-24784	US-PATENT-3,750,479	c05 N73-30078
US-PATENT-3,730,287	c11 N73-26238	US-PATENT-3,751,123	c15 N73-30458
US-PATENT-3,730,851	c18 N73-26572	US-PATENT-3,751,727	c05 N73-32012
US-PATENT-3,731,528	c12 N73-25262	US-PATENT-3,751,733	c05 N73-32013
US-PATENT-3,731,531	c14 N73-25460	US-PATENT-3,751,913	c06 N73-30097
US-PATENT-3,732,400	c15 N73-24513	US-PATENT-3,751,980	c14 N73-32326
US-PATENT-3,732,158	c17 N73-24569	US-PATENT-3,752,556	c35 N74-17153
US-PATENT-3,732,397	c33 N74-14935	US-PATENT-3,752,559	c14 N73-30393
US-PATENT-3,732,405	c10 N73-25240	US-PATENT-3,752,564	c23 N73-30666
US-PATENT-3,732,409	c08 N73-26175	US-PATENT-3,752,665	c18 N73-32437
US-PATENT-3,732,567	c14 N73-25461	US-PATENT-3,752,847	c06 N73-30098

NUMBER INDEX

US-PATENT-3,752,986	.....	c14 N73-30392	US-PATENT-3,781,111	.....	c36 N74-15145
US-PATENT-3,752,993	.....	c21 N73-30640	US-PATENT-3,781,549	.....	c35 N74-15090
US-PATENT-3,752,996	.....	c91 N74-13130	US-PATENT-3,781,562	.....	c35 N74-15091
US-PATENT-3,753,148	.....	c09 N73-32111	US-PATENT-3,781,902	.....	c35 N74-15831
US-PATENT-3,754,236	.....	c08 N73-32081	US-PATENT-3,781,933	.....	c54 N74-14845
US-PATENT-3,754,263	.....	c09 N73-32110	US-PATENT-3,781,958	.....	c37 N74-15128
US-PATENT-3,754,976	.....	c15 N73-32360	US-PATENT-3,782,177	.....	c38 N74-15395
US-PATENT-3,755,265	.....	c06 N73-33076	US-PATENT-3,782,181	.....	c34 N74-15652
US-PATENT-3,755,283	.....	c06 N73-32029	US-PATENT-3,782,205	.....	c35 N74-15094
US-PATENT-3,755,686	.....	c03 N73-31988	US-PATENT-3,782,334	.....	c51 N74-15778
US-PATENT-3,756,920	.....	c05 N73-32011	US-PATENT-3,782,698	.....	c35 N74-15093
US-PATENT-3,757,183	.....	c09 N73-32107	US-PATENT-3,782,699	.....	c35 N74-15126
US-PATENT-3,757,476	.....	c31 N73-32749	US-PATENT-3,782,737	.....	c37 N74-15125
US-PATENT-3,757,568	.....	c14 N73-32323	US-PATENT-3,782,825	.....	c35 N74-15146
US-PATENT-3,757,659	.....	c14 N73-32322	US-PATENT-3,782,835	.....	c74 N74-15095
US-PATENT-3,758,112	.....	c05 N73-32014	US-PATENT-3,782,904	.....	c35 N74-15127
US-PATENT-3,758,718	.....	c10 N73-32143	US-PATENT-3,783,250	.....	c62 N74-14920
US-PATENT-3,758,741	.....	c15 N73-32358	US-PATENT-3,783,354	.....	c33 N74-14956
US-PATENT-3,758,781	.....	c14 N73-32317	US-PATENT-3,783,399	.....	c33 N74-14939
US-PATENT-3,758,877	.....	c16 N73-32391	US-PATENT-3,783,443	.....	c35 N74-16135
US-PATENT-3,759,152	.....	c14 N73-32319	US-PATENT-3,784,499	.....	c27 N74-17283
US-PATENT-3,759,249	.....	c05 N73-32015	US-PATENT-3,787,959	.....	c37 N74-18128
US-PATENT-3,759,443	.....	c28 N73-32606	US-PATENT-3,788,163	.....	c37 N74-18127
US-PATENT-3,759,588	.....	c15 N73-32359	US-PATENT-3,789,654	.....	c25 N74-18551
US-PATENT-3,759,672	.....	c14 N73-32320	US-PATENT-3,789,920	.....	c35 N74-18552
US-PATENT-3,759,746	.....	c09 N73-32108	US-PATENT-3,789,947	.....	c37 N74-18125
US-PATENT-3,759,747	.....	c44 N74-19692	US-PATENT-3,790,037	.....	c54 N74-17853
US-PATENT-3,759,787	.....	c22 N73-32528	US-PATENT-3,790,347	.....	c37 N74-18123
US-PATENT-3,760,239	.....	c09 N73-32112	US-PATENT-3,790,409	.....	c44 N74-19693
US-PATENT-3,760,248	.....	c10 N73-32145	US-PATENT-3,790,432	.....	c37 N74-18126
US-PATENT-3,760,257	.....	c09 N73-32109	US-PATENT-3,790,650	.....	c31 N74-18124
US-PATENT-3,760,268	.....	c14 N73-32318	US-PATENT-3,790,795	.....	c35 N74-18088
US-PATENT-3,760,394	.....	c10 N73-32144	US-PATENT-3,790,906	.....	c33 N74-17927
US-PATENT-3,762,884	.....	c17 N73-32414	US-PATENT-3,791,207	.....	c09 N74-17955
US-PATENT-3,762,918	.....	c17 N73-32415	US-PATENT-3,792,399	.....	c33 N74-17928
US-PATENT-3,763,204	.....	c06 N73-32030	US-PATENT-3,793,109	.....	c31 N74-18089
US-PATENT-3,763,552	.....	c26 N73-32571	US-PATENT-3,795,134	.....	c09 N74-19528
US-PATENT-3,763,691	.....	c14 N73-32327	US-PATENT-3,795,448	.....	c72 N74-19310
US-PATENT-3,763,708	.....	c35 N74-18323	US-PATENT-3,795,840	.....	c33 N74-17929
US-PATENT-3,763,740	.....	c11 N73-32152	US-PATENT-3,795,858	.....	c35 N74-18090
US-PATENT-3,763,928	.....	c33 N73-32818	US-PATENT-3,795,862	.....	c33 N74-17930
US-PATENT-3,764,057	.....	c02 N74-10034	US-PATENT-3,795,900	.....	c35 N74-17885
US-PATENT-3,764,209	.....	c14 N73-33361	US-PATENT-3,795,910	.....	c44 N74-19870
US-PATENT-3,764,220	.....	c16 N73-33397	US-PATENT-3,796,473	.....	c37 N74-20063
US-PATENT-3,764,790	.....	c33 N74-10223	US-PATENT-3,796,592	.....	c24 N74-19769
US-PATENT-3,764,850	.....	c33 N74-10195	US-PATENT-3,797,098	.....	c37 N74-21057
US-PATENT-3,764,933	.....	c33 N74-10194	US-PATENT-3,797,919	.....	c70 N74-21300
US-PATENT-3,765,229	.....	c35 N74-10415	US-PATENT-3,798,741	.....	c31 N74-21059
US-PATENT-3,765,958	.....	c26 N74-10521	US-PATENT-3,798,748	.....	c37 N74-21055
US-PATENT-3,766,315	.....	c32 N74-10132	US-PATENT-3,798,778	.....	c19 N74-21015
US-PATENT-3,766,380	.....	c35 N74-11284	US-PATENT-3,798,896	.....	c37 N74-21060
US-PATENT-3,767,212	.....	c37 N74-10474	US-PATENT-3,799,149	.....	c52 N74-20728
US-PATENT-3,769,623	.....	c32 N74-11000	US-PATENT-3,799,475	.....	c02 N74-20646
US-PATENT-3,769,689	.....	c37 N74-11301	US-PATENT-3,799,793	.....	c74 N74-20008
US-PATENT-3,769,834	.....	c52 N74-10975	US-PATENT-3,799,813	.....	c76 N74-20329
US-PATENT-3,770,021	.....	c33 N74-11050	US-PATENT-3,800,074	.....	c36 N74-20009
US-PATENT-3,770,963	.....	c35 N74-11283	US-PATENT-3,800,082	.....	c71 N74-21014
US-PATENT-3,770,933	.....	c37 N74-11300	US-PATENT-3,800,224	.....	c32 N74-19790
US-PATENT-3,771,037	.....	c08 N74-10942	US-PATENT-3,800,227	.....	c32 N74-20809
US-PATENT-3,771,040	.....	c33 N74-11049	US-PATENT-3,800,237	.....	c37 N74-19788
US-PATENT-3,771,074	.....	c36 N74-11313	US-PATENT-3,800,253	.....	c37 N74-21056
US-PATENT-3,771,959	.....	c25 N74-12813	US-PATENT-3,801,617	.....	c37 N74-21058
US-PATENT-3,772,174	.....	c27 N74-13270	US-PATENT-3,802,249	.....	c35 N74-21019
US-PATENT-3,772,216	.....	c27 N74-12812	US-PATENT-3,802,253	.....	c52 N74-20726
US-PATENT-3,772,220	.....	c27 N74-12814	US-PATENT-3,802,262	.....	c35 N74-21018
US-PATENT-3,772,272	.....	c33 N74-12887	US-PATENT-3,802,660	.....	c37 N74-21065
US-PATENT-3,772,418	.....	c31 N74-13177	US-PATENT-3,802,753	.....	c37 N74-21064
US-PATENT-3,772,691	.....	c32 N74-12912	US-PATENT-3,802,779	.....	c74 N74-21304
US-PATENT-3,773,038	.....	c52 N74-12778	US-PATENT-3,803,090	.....	c27 N74-21156
US-PATENT-3,773,913	.....	c46 N74-13011	US-PATENT-3,803,090	.....	c27 N74-32315
US-PATENT-3,775,101	.....	c37 N74-13179	US-PATENT-3,803,393	.....	c60 N74-20836
US-PATENT-3,776,028	.....	c35 N74-13129	US-PATENT-3,803,445	.....	c42 N74-20813
US-PATENT-3,776,432	.....	c37 N74-13178	US-PATENT-3,803,617	.....	c32 N74-20863
US-PATENT-3,776,455	.....	c04 N74-13420	US-PATENT-3,804,472	.....	c37 N74-21061
US-PATENT-3,777,200	.....	c33 N74-12913	US-PATENT-3,804,472	.....	c37 N74-15461
US-PATENT-3,777,490	.....	c20 N74-13502	US-PATENT-3,804,506	.....	c33 N74-20861
US-PATENT-3,777,546	.....	c35 N74-13132	US-PATENT-3,804,525	.....	c36 N74-21091
US-PATENT-3,777,552	.....	c38 N74-15130	US-PATENT-3,804,703	.....	c37 N74-21063
US-PATENT-3,777,605	.....	c39 N74-13131	US-PATENT-3,805,266	.....	c32 N74-20864
US-PATENT-3,777,942	.....	c54 N74-12779	US-PATENT-3,805,303	.....	c54 N74-20725
US-PATENT-3,778,685	.....	c33 N74-12951	US-PATENT-3,805,622	.....	c35 N74-21062
US-PATENT-3,778,786	.....	c60 N74-12888	US-PATENT-3,806,756	.....	c33 N74-21850
US-PATENT-3,778,791	.....	c36 N74-13205	US-PATENT-3,806,802	.....	c35 N74-21017
US-PATENT-3,779,788	.....	c70 N74-13436	US-PATENT-3,806,815	.....	c32 N74-20811
US-PATENT-3,780,151	.....	c31 N74-14133	US-PATENT-3,806,816	.....	c32 N74-20810
US-PATENT-3,780,424	.....	c44 N74-14784	US-PATENT-3,806,831	.....	c33 N74-20862
US-PATENT-3,780,563	.....	c35 N74-15092	US-PATENT-3,806,834	.....	c36 N74-18427
US-PATENT-3,780,827	.....	c07 N74-15453	US-PATENT-3,806,835	.....	c33 N74-20859
US-PATENT-3,780,966	.....	c19 N74-15089	US-PATENT-3,806,932	.....	c33 N74-20860

NUMBER INDEX

US-PATENT-3, 807,388	.....	c34 N74-23039	US-PATENT-3, 837,285	.....	c85 N74-34672
US-PATENT-3, 807,656	.....	c18 N74-22136	US-PATENT-3, 840,829	.....	c33 N74-34638
US-PATENT-3, 808,464	.....	c33 N74-22814	US-PATENT-3, 841,973	.....	c35 N75-12272
US-PATENT-3, 808,511	.....	c33 N74-22864	US-PATENT-3, 842,485	.....	c37 N75-12326
US-PATENT-3, 808,517	.....	c33 N74-22885	US-PATENT-3, 842,509	.....	c35 N75-12273
US-PATENT-3, 809,481	.....	c35 N74-23040	US-PATENT-3, 842,656	.....	c76 N75-12810
US-PATENT-3, 809,601	.....	c37 N74-23064	US-PATENT-3, 846,243	.....	c25 N75-12086
US-PATENT-3, 809,800	.....	c33 N74-22865	US-PATENT-3, 847,115	.....	c31 N75-12161
US-PATENT-3, 809,871	.....	c52 N74-22771	US-PATENT-3, 847,141	.....	c35 N75-12271
US-PATENT-3, 810,829	.....	c31 N74-23065	US-PATENT-3, 847,208	.....	c34 N75-12222
US-PATENT-3, 811,484	.....	c34 N74-23066	US-PATENT-3, 847,652	.....	c25 N75-12087
US-PATENT-3, 811,494	.....	c33 N74-21851	US-PATENT-3, 847,689	.....	c74 N75-12732
US-PATENT-3, 811,429	.....	c52 N74-27566	US-PATENT-3, 848,150	.....	c35 N75-12270
US-PATENT-3, 812,358	.....	c35 N74-26949	US-PATENT-3, 849,554	.....	c52 N75-15270
US-PATENT-3, 812,783	.....	c28 N74-27425	US-PATENT-3, 849,668	.....	c54 N75-12616
US-PATENT-3, 812,924	.....	c35 N74-26945	US-PATENT-3, 849,720	.....	c33 N77-26387
US-PATENT-3, 812,936	.....	c37 N74-26976	US-PATENT-3, 849,865	.....	c37 N75-13261
US-PATENT-3, 813,183	.....	c37 N74-25968	US-PATENT-3, 849,875	.....	c35 N75-13213
US-PATENT-3, 813,875	.....	c15 N74-27360	US-PATENT-3, 849,877	.....	c24 N75-13032
US-PATENT-3, 813,957	.....	c34 N74-27859	US-PATENT-3, 850,169	.....	c54 N75-13531
US-PATENT-3, 814,083	.....	c52 N74-26626	US-PATENT-3, 850,388	.....	c05 N75-12930
US-PATENT-3, 814,350	.....	c18 N74-27397	US-PATENT-3, 850,567	.....	c31 N75-13111
US-PATENT-3, 814,645	.....	c24 N74-30001	US-PATENT-3, 850,754	.....	c51 N75-13502
US-PATENT-3, 814,653	.....	c24 N74-27035	US-PATENT-3, 851,162	.....	c60 N75-13539
US-PATENT-3, 814,678	.....	c25 N74-26948	US-PATENT-3, 851,238	.....	c33 N75-13139
US-PATENT-3, 814,939	.....	c25 N74-26947	US-PATENT-3, 851,250	.....	c15 N75-13007
US-PATENT-3, 815,048	.....	c33 N74-26732	US-PATENT-3, 853,003	.....	c09 N75-12969
US-PATENT-3, 815,109	.....	c52 N74-26625	US-PATENT-3, 853,075	.....	c09 N75-12968
US-PATENT-3, 815,205	.....	c33 N74-26977	US-PATENT-3, 854,097	.....	c75 N75-13625
US-PATENT-3, 815,969	.....	c35 N74-26946	US-PATENT-3, 854,097	.....	c75 N76-17951
US-PATENT-3, 816,657	.....	c32 N74-26654	US-PATENT-3, 854,113	.....	c37 N75-13265
US-PATENT-3, 816,785	.....	c73 N74-26767	US-PATENT-3, 855,873	.....	c37 N75-13266
US-PATENT-3, 817,082	.....	c34 N74-27730	US-PATENT-3, 856,042	.....	c37 N75-15050
US-PATENT-3, 817,084	.....	c31 N74-27900	US-PATENT-3, 856,402	.....	c36 N75-15028
US-PATENT-3, 817,622	.....	c75 N74-30156	US-PATENT-3, 856,471	.....	c25 N75-14844
US-PATENT-3, 817,627	.....	c35 N74-27860	US-PATENT-3, 856,534	.....	c23 N75-14834
US-PATENT-3, 818,325	.....	c44 N74-27519	US-PATENT-3, 857,031	.....	c35 N75-15014
US-PATENT-3, 818,346	.....	c33 N74-27705	US-PATENT-3, 857,045	.....	c33 N75-14957
US-PATENT-3, 818,767	.....	c35 N74-28097	US-PATENT-3, 859,119	.....	c36 N75-15029
US-PATENT-3, 818,775	.....	c37 N74-27901	US-PATENT-3, 859,714	.....	c37 N75-15992
US-PATENT-3, 818,814	.....	c31 N74-27902	US-PATENT-3, 859,736	.....	c09 N75-15662
US-PATENT-3, 819,299	.....	c37 N74-27904	US-PATENT-3, 859,840	.....	c35 N75-15932
US-PATENT-3, 819,419	.....	c34 N74-27861	US-PATENT-3, 859,845	.....	c35 N75-15931
US-PATENT-3, 819,440	.....	c32 N74-27612	US-PATENT-3, 860,342	.....	c35 N75-16783
US-PATENT-3, 819,550	.....	c27 N74-27037	US-PATENT-3, 860,353	.....	c25 N76-18245
US-PATENT-3, 820,095	.....	c33 N74-27862	US-PATENT-3, 860,858	.....	c33 N75-15874
US-PATENT-3, 820,286	.....	c37 N74-27905	US-PATENT-3, 860,921	.....	c32 N75-15854
US-PATENT-3, 820,388	.....	c35 N74-27865	US-PATENT-3, 863,881	.....	c37 N75-18573
US-PATENT-3, 820,529	.....	c52 N74-27864	US-PATENT-3, 864,060	.....	c35 N75-19611
US-PATENT-3, 820,630	.....	c07 N74-27490	US-PATENT-3, 864,239	.....	c37 N75-19684
US-PATENT-3, 820,741	.....	c37 N74-27903	US-PATENT-3, 864,542	.....	c37 N75-19683
US-PATENT-3, 820,918	.....	c07 N74-28226	US-PATENT-3, 864,797	.....	c20 N75-18310
US-PATENT-3, 821,102	.....	c34 N74-27744	US-PATENT-3, 864,797	.....	c37 N76-14461
US-PATENT-3, 821,462	.....	c33 N74-27683	US-PATENT-3, 864,953	.....	c35 N75-19615
US-PATENT-3, 821,546	.....	c33 N74-27682	US-PATENT-3, 864,960	.....	c35 N75-19612
US-PATENT-3, 821,566	.....	c74 N74-27866	US-PATENT-3, 865,442	.....	c37 N75-18574
US-PATENT-3, 824,707	.....	c09 N74-30597	US-PATENT-3, 865,975	.....	c36 N75-19652
US-PATENT-3, 825,760	.....	c19 N74-29410	US-PATENT-3, 866,022	.....	c33 N75-19519
US-PATENT-3, 826,448	.....	c08 N74-30421	US-PATENT-3, 866,114	.....	c33 N75-18477
US-PATENT-3, 826,726	.....	c25 N74-30502	US-PATENT-3, 866,128	.....	c33 N75-19515
US-PATENT-3, 826,729	.....	c20 N74-31269	US-PATENT-3, 866,210	.....	c33 N75-19517
US-PATENT-3, 826,964	.....	c33 N74-29556	US-PATENT-3, 866,233	.....	c33 N75-19516
US-PATENT-3, 827,288	.....	c71 N74-31148	US-PATENT-3, 866,863	.....	c18 N75-19329
US-PATENT-3, 827,807	.....	c89 N74-30886	US-PATENT-3, 867,677	.....	c33 N75-19524
US-PATENT-3, 828,137	.....	c32 N74-30524	US-PATENT-3, 868,591	.....	c36 N75-19655
US-PATENT-3, 828,138	.....	c32 N74-30523	US-PATENT-3, 868,830	.....	c77 N75-20139
US-PATENT-3, 828,524	.....	c34 N74-30608	US-PATENT-3, 868,856	.....	c35 N75-19614
US-PATENT-3, 829,237	.....	c07 N74-31270	US-PATENT-3, 869,151	.....	c37 N75-19686
US-PATENT-3, 829,839	.....	c60 N76-18800	US-PATENT-3, 869,210	.....	c36 N75-19653
US-PATENT-3, 830,060	.....	c44 N74-33379	US-PATENT-3, 869,212	.....	c35 N75-19613
US-PATENT-3, 830,094	.....	c35 N74-32879	US-PATENT-3, 869,597	.....	c77 N75-20140
US-PATENT-3, 830,335	.....	c07 N74-32418	US-PATENT-3, 869,615	.....	c35 N75-19616
US-PATENT-3, 830,431	.....	c07 N74-32218	US-PATENT-3, 869,624	.....	c33 N75-18479
US-PATENT-3, 830,552	.....	c37 N74-32921	US-PATENT-3, 869,659	.....	c33 N75-19522
US-PATENT-3, 830,552	.....	c37 N76-15461	US-PATENT-3, 869,667	.....	c33 N75-19521
US-PATENT-3, 830,609	.....	c31 N74-32920	US-PATENT-3, 869,676	.....	c33 N75-19520
US-PATENT-3, 830,673	.....	c28 N74-33209	US-PATENT-3, 869,680	.....	c36 N75-19654
US-PATENT-3, 831,058	.....	c33 N74-32711	US-PATENT-3, 869,779	.....	c26 N75-19408
US-PATENT-3, 831,117	.....	c33 N74-32712	US-PATENT-3, 872,395	.....	c33 N75-19518
US-PATENT-3, 831,142	.....	c32 N74-32598	US-PATENT-3, 874,240	.....	c35 N75-25122
US-PATENT-3, 832,290	.....	c20 N74-32919	US-PATENT-3, 874,635	.....	c37 N75-25185
US-PATENT-3, 832,735	.....	c54 N74-32546	US-PATENT-3, 874,677	.....	c37 N75-21631
US-PATENT-3, 832,764	.....	c37 N74-32918	US-PATENT-3, 875,332	.....	c32 N75-21486
US-PATENT-3, 832,781	.....	c35 N74-32877	US-PATENT-3, 875,394	.....	c33 N75-26243
US-PATENT-3, 832,903	.....	c35 N74-32878	US-PATENT-3, 875,404	.....	c35 N75-23910
US-PATENT-3, 833,322	.....	c31 N74-32917	US-PATENT-3, 875,435	.....	c20 N75-24837
US-PATENT-3, 833,336	.....	c25 N74-33378	US-PATENT-3, 875,500	.....	c35 N75-21582
US-PATENT-3, 833,857	.....	c33 N74-32660	US-PATENT-3, 875,500	.....	c35 N77-17426
US-PATENT-3, 835,318	.....	c35 N74-34857	US-PATENT-3, 875,584	.....	c32 N75-21485

NUMBER INDEX

US-PATENT-3, 877, 833	.....	c37 N75-25186	US-PATENT-3, 914, 991	.....	C35 N76-14430
US-PATENT-3, 878, 464	.....	c32 N75-24981	US-PATENT-3, 914, 997	.....	C35 N76-14429
US-PATENT-3, 881, 132	.....	c33 N77-21315	US-PATENT-3, 915, 012	.....	C54 N76-14804
US-PATENT-3, 882, 530	.....	c76 N75-25730	US-PATENT-3, 915, 148	.....	C44 N76-14602
US-PATENT-3, 882, 634	.....	c51 N75-25503	US-PATENT-3, 915, 416	.....	C15 N76-14158
US-PATENT-3, 882, 719	.....	c14 N75-24794	US-PATENT-3, 915, 482	.....	C37 N76-14460
US-PATENT-3, 882, 732	.....	c12 N75-24774	US-PATENT-3, 915, 572	.....	C36 N76-14447
US-PATENT-3, 882, 846	.....	c05 N75-24716	US-PATENT-3, 916, 060	.....	C27 N76-15410
US-PATENT-3, 883, 095	.....	c07 N75-24736	US-PATENT-3, 916, 084	.....	C33 N76-14371
US-PATENT-3, 883, 215	.....	c35 N75-25124	US-PATENT-3, 916, 187	.....	C35 N76-15431
US-PATENT-3, 883, 436	.....	c74 N75-25706	US-PATENT-3, 916, 316	.....	C32 N76-14321
US-PATENT-3, 883, 689	.....	c35 N75-25123	US-PATENT-3, 916, 380	.....	C60 N76-14818
US-PATENT-3, 883, 785	.....	c09 N75-24758	US-PATENT-3, 916, 761	.....	C75 N76-14931
US-PATENT-3, 883, 812	.....	c33 N75-25041	US-PATENT-3, 919, 014	.....	C24 N76-14203
US-PATENT-3, 883, 817	.....	c33 N75-25040	US-PATENT-3, 919, 710	.....	C33 N76-14372
US-PATENT-3, 883, 872	.....	c32 N75-24982	US-PATENT-3, 920, 339	.....	C27 N76-14264
US-PATENT-3, 884, 432	.....	c05 N75-25914	US-PATENT-3, 920, 413	.....	C44 N76-14595
US-PATENT-3, 884, 765	.....	c35 N75-27330	US-PATENT-3, 920, 416	.....	C44 N76-18642
US-PATENT-3, 887, 233	.....	c05 N75-25915	US-PATENT-3, 920, 416	.....	C44 N76-29704
US-PATENT-3, 887, 345	.....	c35 N75-26334	US-PATENT-3, 922, 930	.....	C37 N76-15457
US-PATENT-3, 887, 365	.....	c37 N75-26371	US-PATENT-3, 923, 166	.....	C37 N76-15460
US-PATENT-3, 888, 362	.....	c54 N75-27758	US-PATENT-3, 924, 068	.....	C32 N76-16249
US-PATENT-3, 888, 410	.....	c34 N75-26282	US-PATENT-3, 924, 137	.....	C72 N76-15860
US-PATENT-3, 888, 561	.....	c35 N75-27328	US-PATENT-3, 924, 164	.....	C33 N76-15373
US-PATENT-3, 888, 705	.....	c25 N75-26043	US-PATENT-3, 924, 176	.....	C35 N76-16390
US-PATENT-3, 889, 064	.....	c32 N75-26195	US-PATENT-3, 924, 183	.....	C33 N76-16331
US-PATENT-3, 889, 122	.....	c37 N75-26372	US-PATENT-3, 924, 200	.....	C35 N76-15436
US-PATENT-3, 889, 155	.....	c33 N75-26244	US-PATENT-3, 924, 237	.....	C32 N76-15330
US-PATENT-3, 889, 182	.....	c33 N75-26245	US-PATENT-3, 924, 239	.....	C35 N76-15435
US-PATENT-3, 889, 185	.....	c33 N75-26246	US-PATENT-3, 924, 267	.....	C35 N76-16391
US-PATENT-3, 889, 264	.....	c32 N75-26194	US-PATENT-3, 924, 444	.....	C35 N76-15432
US-PATENT-3, 891, 311	.....	c54 N75-27759	US-PATENT-3, 925, 104	.....	C35 N76-15434
US-PATENT-3, 891, 452	.....	c27 N75-27160	US-PATENT-3, 925, 312	.....	C23 N76-15268
US-PATENT-3, 891, 533	.....	c33 N75-27252	US-PATENT-3, 926, 482	.....	C37 N76-15461
US-PATENT-3, 891, 848	.....	c45 N75-27585	US-PATENT-3, 926, 567	.....	C27 N76-15311
US-PATENT-3, 891, 851	.....	c35 N75-27331	US-PATENT-3, 927, 227	.....	C12 N76-15189
US-PATENT-3, 893, 449	.....	c54 N75-27760	US-PATENT-3, 927, 324	.....	C35 N76-15433
US-PATENT-3, 893, 458	.....	c54 N75-27761	US-PATENT-3, 927, 408	.....	C32 N76-15329
US-PATENT-3, 893, 573	.....	c18 N75-27041	US-PATENT-3, 928, 708	.....	C27 N76-16230
US-PATENT-3, 894, 289	.....	c36 N75-27364	US-PATENT-3, 929, 119	.....	C75 N76-17951
US-PATENT-3, 894, 677	.....	c24 N75-28135	US-PATENT-3, 929, 305	.....	C34 N76-17317
US-PATENT-3, 894, 887	.....	c44 N76-18641	US-PATENT-3, 929, 306	.....	C18 N76-17185
US-PATENT-3, 895, 521	.....	c35 N75-29381	US-PATENT-3, 929, 364	.....	C35 N76-16392
US-PATENT-3, 895, 912	.....	c35 N75-29380	US-PATENT-3, 930, 628	.....	C02 N76-16014
US-PATENT-3, 896, 758	.....	c35 N75-33367	US-PATENT-3, 930, 735	.....	C66 N76-19888
US-PATENT-3, 896, 955	.....	c37 N77-22480	US-PATENT-3, 931, 132	.....	C27 N76-16228
US-PATENT-3, 898, 578	.....	c33 N75-30428	US-PATENT-3, 931, 447	.....	C27 N76-16229
US-PATENT-3, 898, 730	.....	c24 N75-30260	US-PATENT-3, 931, 456	.....	C33 N76-16332
US-PATENT-3, 898, 882	.....	c35 N75-30503	US-PATENT-3, 931, 462	.....	C45 N76-17656
US-PATENT-3, 899, 224	.....	c37 N75-30562	US-PATENT-3, 931, 516	.....	C35 N76-16393
US-PATENT-3, 899, 252	.....	c35 N75-30502	US-PATENT-3, 931, 532	.....	C44 N76-16612
US-PATENT-3, 899, 517	.....	c23 N75-30256	US-PATENT-3, 936, 927	.....	C37 N76-19437
US-PATENT-3, 899, 680	.....	c73 N75-30876	US-PATENT-3, 937, 055	.....	C37 N76-18454
US-PATENT-3, 899, 696	.....	c36 N75-30524	US-PATENT-3, 937, 212	.....	C33 N76-19338
US-PATENT-3, 899, 745	.....	c33 N75-30429	US-PATENT-3, 937, 215	.....	C52 N76-19785
US-PATENT-3, 900, 705	.....	c33 N75-30431	US-PATENT-3, 937, 367	.....	C37 N76-18455
US-PATENT-3, 900, 741	.....	c35 N75-30504	US-PATENT-3, 937, 533	.....	C37 N76-18459
US-PATENT-3, 900, 847	.....	c03 N75-30132	US-PATENT-3, 937, 555	.....	C35 N76-18402
US-PATENT-3, 902, 143	.....	c33 N75-30430	US-PATENT-3, 937, 661	.....	C37 N76-18456
US-PATENT-3, 903, 659	.....	c44 N75-32581	US-PATENT-3, 937, 945	.....	C74 N76-18913
US-PATENT-3, 903, 699	.....	c44 N76-23675	US-PATENT-3, 938, 035	.....	C33 N76-19339
US-PATENT-3, 905, 356	.....	c33 N75-31329	US-PATENT-3, 938, 037	.....	C26 N76-18257
US-PATENT-3, 905, 660	.....	c37 N75-31446	US-PATENT-3, 938, 162	.....	C32 N76-18295
US-PATENT-3, 906, 231	.....	c33 N75-31332	US-PATENT-3, 938, 182	.....	C33 N76-18353
US-PATENT-3, 906, 296	.....	c33 N75-31331	US-PATENT-3, 938, 188	.....	C33 N76-18345
US-PATENT-3, 906, 374	.....	c33 N75-31330	US-PATENT-3, 938, 367	.....	C35 N76-18401
US-PATENT-3, 906, 393	.....	c36 N75-31427	US-PATENT-3, 938, 373	.....	C35 N76-18400
US-PATENT-3, 906, 397	.....	c36 N75-31426	US-PATENT-3, 938, 742	.....	C07 N76-18117
US-PATENT-3, 906, 398	.....	c36 N75-32441	US-PATENT-3, 938, 892	.....	C74 N76-19935
US-PATENT-3, 906, 769	.....	c24 N75-33181	US-PATENT-3, 938, 956	.....	C35 N76-18403
US-PATENT-3, 906, 788	.....	c35 N75-33369	US-PATENT-3, 939, 048	.....	C37 N76-18458
US-PATENT-3, 906, 913	.....	c37 N76-18457	US-PATENT-3, 939, 439	.....	C36 N76-18428
US-PATENT-3, 906, 954	.....	c52 N75-33640	US-PATENT-3, 940, 097	.....	C34 N76-18364
US-PATENT-3, 907, 312	.....	c37 N75-33395	US-PATENT-3, 940, 621	.....	C34 N76-18374
US-PATENT-3, 907, 646	.....	c35 N75-33368	US-PATENT-3, 941, 355	.....	C37 N76-19436
US-PATENT-3, 907, 686	.....	c34 N75-33342	US-PATENT-3, 942, 358	.....	C37 N76-20480
US-PATENT-3, 910, 035	.....	c20 N76-14190	US-PATENT-3, 943, 368	.....	C74 N76-20958
US-PATENT-3, 910, 039	.....	c20 N76-14191	US-PATENT-3, 943, 442	.....	C76 N76-20994
US-PATENT-3, 910, 257	.....	c52 N76-14757	US-PATENT-3, 943, 763	.....	C04 N76-20114
US-PATENT-3, 910, 307	.....	c37 N76-14463	US-PATENT-3, 943, 763	.....	C04 N77-19056
US-PATENT-3, 910, 533	.....	c18 N76-14186	US-PATENT-3, 945, 801	.....	C45 N76-21742
US-PATENT-3, 910, 814	.....	c24 N76-14204	US-PATENT-3, 945, 879	.....	C37 N76-21554
US-PATENT-3, 911, 260	.....	c35 N76-14431	US-PATENT-3, 947, 933	.....	C20 N76-21276
US-PATENT-3, 911, 330	.....	c33 N76-14373	US-PATENT-3, 948, 102	.....	C33 N76-21390
US-PATENT-3, 912, 540	.....	c44 N76-14600	US-PATENT-3, 948, 470	.....	C20 N76-21275
US-PATENT-3, 912, 541	.....	c44 N76-14601	US-PATENT-3, 949, 206	.....	C32 N76-21366
US-PATENT-3, 912, 959	.....	c44 N76-18643	US-PATENT-3, 949, 400	.....	C17 N76-21250
US-PATENT-3, 914, 950	.....	c31 N76-14284	US-PATENT-3, 949, 404	.....	C32 N76-21365
US-PATENT-3, 914, 969	.....	c37 N76-14461	US-PATENT-3, 950, 729	.....	C60 N76-21914

NUMBER INDEX

US-PATENT-3,551,129	c44	N76-22657	US-PATENT-3,984,799	c33	N77-10428
US-PATENT-3,552,083	c27	N76-22376	US-PATENT-3,985,454	c74	N77-10899
US-PATENT-3,552,550	c09	N76-23273	US-PATENT-3,987,630	c37	N77-12402
US-PATENT-3,552,971	c02	N76-22154	US-PATENT-3,988,561	c37	N77-11397
US-PATENT-3,552,976	c37	N76-22540	US-PATENT-3,988,677	c32	N77-12240
US-PATENT-3,552,980	c19	N76-22284	US-PATENT-3,988,716	c60	N77-12721
US-PATENT-3,552,998	c20	N76-22296	US-PATENT-3,988,729	c32	N77-12259
US-PATENT-3,553,038	c37	N76-22541	US-PATENT-3,988,933	c35	N77-19385
US-PATENT-3,553,343	c24	N76-22309	US-PATENT-3,989,136	c37	N77-19457
US-PATENT-3,553,646	c27	N76-22377	US-PATENT-3,989,206	c09	N77-19076
US-PATENT-3,553,674	c17	N76-22245	US-PATENT-3,989,541	c44	N77-19571
US-PATENT-3,553,734	c25	N76-22323	US-PATENT-3,989,602	c24	N77-19171
US-PATENT-3,553,792	c35	N76-22509	US-PATENT-3,990,049	c60	N77-19760
US-PATENT-3,555,034	c27	N76-23426	US-PATENT-3,990,860	c27	N77-13217
US-PATENT-3,555,541	c44	N76-29700	US-PATENT-3,990,987	c37	N77-13418
US-PATENT-3,556,032	c76	N76-25049	US-PATENT-3,994,128	c07	N77-14025
US-PATENT-3,556,050	c37	N76-24575	US-PATENT-3,995,324	c52	N77-14735
US-PATENT-3,556,233	c27	N76-24405	US-PATENT-3,995,476	c35	N77-14407
US-PATENT-3,556,833	c09	N76-24280	US-PATENT-3,995,522	c37	N77-14478
US-PATENT-3,556,919	c35	N76-24523	US-PATENT-3,995,621	c52	N77-14736
US-PATENT-3,556,932	c35	N76-24524	US-PATENT-3,995,644	c52	N77-14738
US-PATENT-3,557,030	c44	N76-23675	US-PATENT-3,995,789	c37	N77-14479
US-PATENT-3,557,037	c35	N76-24525	US-PATENT-3,995,877	c37	N77-14477
US-PATENT-3,557,044	c54	N76-24900	US-PATENT-3,995,960	c35	N77-14411
US-PATENT-3,557,104	c37	N76-23570	US-PATENT-3,996,064	c44	N77-14581
US-PATENT-3,557,675	c24	N76-24363	US-PATENT-3,996,067	c44	N77-14580
US-PATENT-3,558,188	c36	N76-24553	US-PATENT-3,996,070	c35	N77-14409
US-PATENT-3,558,238	c60	N76-23850	US-PATENT-3,996,455	c60	N77-14751
US-PATENT-3,558,553	c44	N76-24696	US-PATENT-3,996,455	c60	N77-32731
US-PATENT-3,561,957	c44	N76-28635	US-PATENT-3,996,462	c33	N77-14335
US-PATENT-3,564,306	c34	N76-27517	US-PATENT-3,996,464	c35	N77-14406
US-PATENT-3,564,319	c07	N76-27232	US-PATENT-3,996,468	c35	N77-14408
US-PATENT-3,564,813	c37	N76-27567	US-PATENT-3,996,471	c52	N77-14737
US-PATENT-3,564,902	c34	N76-27515	US-PATENT-3,996,506	c33	N77-14333
US-PATENT-3,564,928	c44	N76-27664	US-PATENT-3,996,532	c32	N77-14292
US-PATENT-3,565,056	c27	N76-32315	US-PATENT-3,997,848	c33	N77-14334
US-PATENT-3,565,354	c33	N76-27473	US-PATENT-3,999,886	c05	N77-17029
US-PATENT-3,565,475	c33	N76-27472	US-PATENT-4,000,682	c20	N77-17143
US-PATENT-3,566,499	c44	N76-31666	US-PATENT-4,000,929	c37	N77-17464
US-PATENT-3,566,547	c25	N76-27383	US-PATENT-4,001,552	c38	N77-17495
US-PATENT-3,567,051	c37	N76-27568	US-PATENT-4,001,602	c33	N77-17354
US-PATENT-3,571,230	c37	N76-29590	US-PATENT-4,003,004	c33	N77-17351
US-PATENT-3,571,256	c91	N76-30131	US-PATENT-4,003,084	c35	N77-17426
US-PATENT-3,571,362	c52	N76-29894	US-PATENT-4,003,257	c23	N77-17161
US-PATENT-3,571,363	c52	N76-29895	US-PATENT-4,004,292	c74	N77-18893
US-PATENT-3,571,364	c52	N76-29896	US-PATENT-4,005,574	c07	N77-17059
US-PATENT-3,571,535	c05	N76-29217	US-PATENT-4,006,631	c04	N77-19056
US-PATENT-3,571,602	c37	N76-29588	US-PATENT-4,006,999	c24	N77-19170
US-PATENT-3,571,657	c25	N76-29379	US-PATENT-4,007,430	c36	N77-19416
US-PATENT-3,571,703	c51	N76-29891	US-PATENT-4,007,434	c32	N77-18307
US-PATENT-3,571,847	c44	N76-29704	US-PATENT-4,007,601	c34	N77-19353
US-PATENT-3,571,915	c35	N76-29552	US-PATENT-4,007,623	c35	N77-18417
US-PATENT-3,571,930	c74	N76-30053	US-PATENT-4,007,891	c07	N77-18154
US-PATENT-3,571,940	c35	N76-29551	US-PATENT-4,008,348	c34	N77-18382
US-PATENT-3,572,008	c36	N76-29575	US-PATENT-4,008,407	c73	N77-18891
US-PATENT-3,572,028	c17	N76-29347	US-PATENT-4,010,455	c37	N77-19458
US-PATENT-3,572,651	c44	N76-29701	US-PATENT-4,011,719	c20	N77-20162
US-PATENT-3,572,727	c44	N76-29699	US-PATENT-4,011,756	c35	N77-20400
US-PATENT-3,576,997	c62	N76-31946	US-PATENT-4,011,854	c35	N77-20401
US-PATENT-3,577,147	c39	N76-31562	US-PATENT-4,012,018	c35	N77-20399
US-PATENT-3,577,157	c44	N76-31667	US-PATENT-4,012,123	c74	N77-20882
US-PATENT-3,577,231	c35	N76-31489	US-PATENT-4,012,237	c26	N77-20201
US-PATENT-3,577,771	c74	N76-31998	US-PATENT-4,012,656	c32	N77-20289
US-PATENT-3,577,787	c35	N76-31490	US-PATENT-4,014,745	c51	N77-22794
US-PATENT-3,577,831	c45	N76-31714	US-PATENT-4,017,959	c37	N77-23482
US-PATENT-3,578,187	c37	N76-31524	US-PATENT-4,018,080	c35	N77-22450
US-PATENT-3,578,287	c32	N76-31372	US-PATENT-4,018,085	c35	N77-22449
US-PATENT-3,578,350	c33	N76-31410	US-PATENT-4,018,092	c37	N77-22482
US-PATENT-3,578,360	c33	N76-31409	US-PATENT-4,018,409	c37	N77-23483
US-PATENT-3,578,364	c31	N76-31365	US-PATENT-4,018,423	c54	N77-21844
US-PATENT-3,578,410	c03	N76-32140	US-PATENT-4,018,532	c74	N77-22951
US-PATENT-3,578,417	c36	N76-31512	US-PATENT-4,018,533	c74	N77-22950
US-PATENT-3,578,490	c33	N76-32457	US-PATENT-4,018,649	c51	N77-25769
US-PATENT-3,582,910	c44	N77-10636	US-PATENT-4,018,971	c44	N77-22606
US-PATENT-3,583,695	c20	N77-10148	US-PATENT-4,019,179	c32	N77-21267
US-PATENT-3,583,714	c31	N77-10229	US-PATENT-4,019,868	c44	N77-22607
US-PATENT-3,583,749	c09	N77-10071	US-PATENT-4,020,632	c07	N77-23106
US-PATENT-3,583,753	c52	N77-10780	US-PATENT-4,023,266	c33	N77-26385
US-PATENT-3,583,780	c28	N77-10213	US-PATENT-4,025,327	c35	N77-24455
US-PATENT-3,583,933	c34	N77-10463	US-PATENT-4,025,783	c74	N77-26942
US-PATENT-3,584,070	c02	N77-10001	US-PATENT-4,025,866	c33	N77-24375
US-PATENT-3,584,072	c15	N77-10113	US-PATENT-4,025,875	c36	N77-25499
US-PATENT-3,584,256	c44	N77-10635	US-PATENT-4,025,876	c71	N77-26919
US-PATENT-3,584,634	c32	N77-10392	US-PATENT-4,025,891	c35	N77-24454
US-PATENT-3,584,671	c43	N77-10584	US-PATENT-4,025,950	c32	N77-24328
US-PATENT-3,584,681	c35	N77-10492	US-PATENT-4,025,964	c52	N77-25772
US-PATENT-3,584,685	c47	N77-10753	US-PATENT-4,026,527	c34	N77-24423
US-PATENT-3,584,686	c35	N77-10493	US-PATENT-4,026,655	c36	N77-25501
US-PATENT-3,584,730	c33	N77-10429	US-PATENT-4,027,212	c33	N77-26386

NUMBER INDEX

US-PATENT-4,027,265	.....	c32	N77-24331
US-PATENT-4,027,273	.....	c36	N77-25502
US-PATENT-4,027,524	.....	c09	N77-27131
US-PATENT-4,028,939	.....	c34	N77-27345
US-PATENT-4,029,470	.....	c51	N77-27677
US-PATENT-4,029,500	.....	c24	N77-27187
US-PATENT-4,029,838	.....	c24	N77-27188
US-PATENT-4,030,047	.....	c35	N77-27366
US-PATENT-4,031,389	.....	c36	N77-26477
US-PATENT-4,032,089	.....	c24	N77-28225
US-PATENT-4,033,119	.....	c07	N77-28118
US-PATENT-4,033,182	.....	c39	N77-28511
US-PATENT-4,033,316	.....	c33	N77-28385
US-PATENT-4,033,334	.....	c52	N77-28717
US-PATENT-4,033,349	.....	c52	N77-28716
US-PATENT-4,033,479	.....	c37	N77-28487
US-PATENT-4,033,503	.....	c26	N77-29260
US-PATENT-4,033,504	.....	c26	N77-28265
US-PATENT-4,033,705	.....	c17	N77-27116
US-PATENT-4,033,882	.....	c32	N77-28346
US-PATENT-4,035,037	.....	c37	N77-28486
US-PATENT-4,035,062	.....	c74	N77-28932
US-PATENT-4,035,065	.....	c74	N77-28933
US-PATENT-4,038,705	.....	c54	N77-30749
US-PATENT-4,039,489	.....	c27	N77-31308
US-PATENT-4,039,946	.....	c35	N77-30436
US-PATENT-4,039,000	.....	c34	N77-30399
US-PATENT-4,039,347	.....	c27	N77-30237
US-PATENT-4,039,754	.....	c32	N77-30309
US-PATENT-4,039,925	.....	c33	N77-30365
US-PATENT-4,040,041	.....	c33	N77-31404
US-PATENT-4,040,750	.....	c35	N77-31465
US-PATENT-4,040,867	.....	c44	N77-31601
US-PATENT-4,041,233	.....	c27	N77-30236
US-PATENT-4,041,351	.....	c32	N77-30308
US-PATENT-4,041,910	.....	c37	N77-31497
US-PATENT-4,042,926	.....	c32	N77-31350
US-PATENT-4,043,674	.....	c36	N77-32478
US-PATENT-4,044,753	.....	c44	N77-32582
US-PATENT-4,044,821	.....	c44	N77-32581
US-PATENT-4,045,063	.....	c37	N77-32499
US-PATENT-4,045,149	.....	c07	N77-32148
US-PATENT-4,045,247	.....	c35	N77-32454
US-PATENT-4,045,255	.....	c26	N77-32279
US-PATENT-4,045,315	.....	c44	N77-32580
US-PATENT-4,045,359	.....	c25	N77-32255
US-PATENT-4,045,728	.....	c35	N77-32455
US-PATENT-4,045,792	.....	c60	N77-32731
US-PATENT-4,045,755	.....	c32	N77-32342
US-PATENT-4,046,012	.....	c35	N77-32456
US-PATENT-4,046,190	.....	c34	N77-32413
US-PATENT-4,046,262	.....	c54	N77-32721
US-PATENT-4,046,434	.....	c37	N77-32500
US-PATENT-4,046,435	.....	c37	N77-32501
US-PATENT-4,046,462	.....	c44	N77-32583
US-PATENT-4,046,529	.....	c54	N77-32722
US-PATENT-4,046,560	.....	c26	N77-32280
US-PATENT-4,046,617	.....	c76	N77-32919
US-PATENT-4,046,619	.....	c27	N77-32308

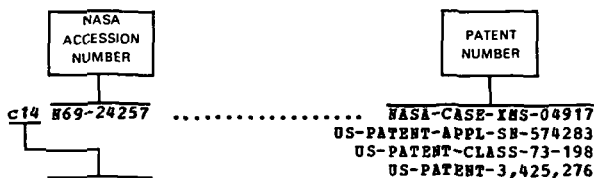
Accession Number Index

NASA PATENT ABSTRACTS BIBLIOGRAPHY

JANUARY 1978

Section 2

Typical Accession Number Index Listing



Listings in the index are arranged numerically by NASA accession number. The category number indicates the category in Section 1 (Abstracts) in which the citation is located. The NASA accession number denotes the number by which the citation is identified within the subject category. The patent numbers are the identification numbers that have been assigned to the item by the issuing body or other agency.

c09 N69-21313 NASA-CASE-XAR-03786
US-PATENT-APPL-SN-476763
US-PATENT-CLASS-310-4
US-PATENT-3,423,608
c03 N69-21330 NASA-CASE-XGS-03429
US-PATENT-APPL-SN-591930
US-PATENT-CLASS-321-2
US-PATENT-3,427,525
c03 N69-21337 NASA-CASE-XNP-04264
US-PATENT-APPL-SN-447933
US-PATENT-CLASS-136-146
US-PATENT-3,421,948
c15 N69-21362 NASA-CASE-XLE-05130
US-PATENT-APPL-SN-545224
US-PATENT-CLASS-277-25
US-PATENT-3,421,768
c14 N69-21363 NASA-CASE-XGS-03865
US-PATENT-APPL-SN-478491
US-PATENT-CLASS-333-174
US-PATENT-3,419,964
c05 N69-21380 NASA-CASE-XLA-08491
US-PATENT-APPL-SN-619520
US-PATENT-CLASS-244-4
US-PATENT-3,420,471
c15 N69-21460 NASA-CASE-XKS-04614
US-PATENT-APPL-SN-574280
US-PATENT-CLASS-117-201
US-PATENT-3,420,704
c15 N69-21465 NASA-CASE-XLA-08645
US-PATENT-APPL-SN-635970
US-PATENT-CLASS-62-93
US-PATENT-3,420,069
c12 N69-21466 NASA-CASE-XLE-03512
US-PATENT-APPL-SN-462762
US-PATENT-CLASS-137-81.5
US-PATENT-3,420,253
c09 N69-21467 NASA-CASE-XMS-06949
US-PATENT-APPL-SN-635328
US-PATENT-CLASS-346-44
US-PATENT-3,422,440
c09 N69-21468 NASA-CASE-XNP-05612
US-PATENT-APPL-SN-562934
US-PATENT-CLASS-307-106
US-PATENT-3,422,278
c03 N69-21469 NASA-CASE-XMS-04843
US-PATENT-APPL-SN-545229
US-PATENT-CLASS-137-624.14
US-PATENT-3,421,549
c09 N69-21470 NASA-CASE-XLA-01288
US-PATENT-APPL-SN-460876
US-PATENT-CLASS-339-150
US-PATENT-3,421,134
c15 N69-21471 NASA-CASE-XMS-03537
US-PATENT-APPL-SN-468655
US-PATENT-CLASS-219-121
US-PATENT-3,420,978
c15 N69-21472 NASA-CASE-XGS-02437

US-PATENT-APPL-SN-487344
US-PATENT-CLASS-317-157.5
US-PATENT-3,421,053
c05 N69-21473 NASA-CASE-XAR-01547
US-PATENT-APPL-SN-391343
US-PATENT-CLASS-128-2.08
US-PATENT-3,420,225
c03 N69-21539 NASA-CASE-XGS-01395
US-PATENT-APPL-SN-545535
US-PATENT-CLASS-174-72
US-PATENT-3,422,213
c11 N69-21540 NASA-CASE-XLA-02704
US-PATENT-APPL-SN-469011
US-PATENT-CLASS-73-67.2
US-PATENT-3,421,363
c14 N69-21541 NASA-CASE-XNP-09752
US-PATENT-APPL-SN-640460
US-PATENT-CLASS-317-246
US-PATENT-3,422,324
c09 N69-21542 NASA-CASE-XLE-03778
US-PATENT-APPL-SN-628247
US-PATENT-CLASS-174-18
US-PATENT-3,420,945
c09 N69-21543 NASA-CASE-XGS-04994
US-PATENT-APPL-SN-619907
US-PATENT-CLASS-331-4
US-PATENT-3,421,105
c15 N69-21922 NASA-CASE-XBQ-03903
US-PATENT-APPL-SN-560967
US-PATENT-CLASS-23-208
US-PATENT-3,423,179
c14 N69-21923 NASA-CASE-XNP-07478
US-PATENT-APPL-SN-605097
US-PATENT-CLASS-175-323
US-PATENT-3,421,591
c15 N69-21924 NASA-CASE-XMS-05894-1
US-PATENT-APPL-SN-685766
US-PATENT-CLASS-137-491
US-PATENT-3,421,541
c05 N69-21925 NASA-CASE-XNP-02872
US-PATENT-APPL-SN-422864
US-PATENT-CLASS-128-2.06
US-PATENT-3,420,223
c09 N69-21926 NASA-CASE-XNP-06032
US-PATENT-APPL-SN-590146
US-PATENT-CLASS-324-158
US-PATENT-3,422,354
c09 N69-21927 NASA-CASE-XMS-07846-1
US-PATENT-APPL-SN-694247
US-PATENT-CLASS-339-91
US-PATENT-3,422,390
c08 N69-21928 NASA-CASE-XNP-09785
US-PATENT-APPL-SN-599975
US-PATENT-CLASS-340-172.5
US-PATENT-3,422,403
c25 N69-21929 NASA-CASE-XNP-07481
US-PATENT-APPL-SN-563650
US-PATENT-CLASS-310-11
US-PATENT-3,422,291
c15 N69-23185 NASA-CASE-XNP-05975
US-PATENT-APPL-SN-570097
US-PATENT-CLASS-239-416
US-PATENT-3,421,700
c15 N69-23190 NASA-CASE-NPO-10309
US-PATENT-APPL-SN-574282
US-PATENT-APPL-SN-700985
US-PATENT-CLASS-62-6
US-PATENT-3,421,331
c14 N69-23191 NASA-CASE-XLE-10529
US-PATENT-APPL-SN-603396
US-PATENT-CLASS-317-234
US-PATENT-3,421,056
c05 N69-23192 NASA-CASE-XMS-06761
US-PATENT-APPL-SN-575475
US-PATENT-CLASS-128-283
US-PATENT-3,421,506
c14 N69-24257 NASA-CASE-XMS-04917
US-PATENT-APPL-SN-574283
US-PATENT-CLASS-73-198
US-PATENT-3,425,276

ACCESSION

ACCESSION NUMBER INDEX

c15 N69-24266	NASA-CASE-XMS-03700	US-PATENT-APPL-SN-617783	US-PATENT-APPL-SN-685764
	US-PATENT-CLASS-314-129	US-PATENT-3,431,149	
	US-PATENT-3,428,847		
c07 N69-24267	NASA-CASE-XGS-04531	NASA-CASE-XGS-05582	
	US-PATENT-APPL-SN-590141	US-PATENT-APPL-SN-646424	
	US-PATENT-CLASS-136-89	US-PATENT-CLASS-343-854	
	US-PATENT-3,437,527	US-PATENT-3,438,044	
c09 N69-24317	NASA-CASE-XGS-04999	NASA-CASE-XIA-03724	
	US-PATENT-APPL-SN-519395	US-PATENT-APPL-SN-568071	
	US-PATENT-CLASS-307-268	US-PATENT-CLASS-350-6	
	US-PATENT-3,426,219	US-PATENT-3,437,394	
c09 N69-24318	NASA-CASE-XGS-05003	NASA-CASE-XMS-05303	
	US-PATENT-APPL-SN-576797	US-PATENT-APPL-SN-617022	
	US-PATENT-CLASS-317-235	US-PATENT-CLASS-333-97	
	US-PATENT-3,430,115	US-PATENT-3,428,923	
c15 N69-24319	NASA-CASE-XNP-09227	NASA-CASE-XGS-03095	
	US-PATENT-APPL-SN-632164	US-PATENT-APPL-SN-552344	
	US-PATENT-CLASS-313-44	US-PATENT-CLASS-307-222	
	US-PATENT-3,426,230	US-PATENT-3,437,832	
c15 N69-24320	NASA-CASE-XGS-03864	NASA-CASE-XNP-04969	
	US-PATENT-APPL-SN-577114	US-PATENT-APPL-SN-593604	
	US-PATENT-CLASS-136-133	US-PATENT-CLASS-248-317	
	US-PATENT-3,427,205	US-PATENT-3,430,909	
c11 N69-24321	NASA-CASE-XLA-03271	NASA-CASE-XLA-04105	
	US-PATENT-APPL-SN-482313	US-PATENT-APPL-SN-529594	
	US-PATENT-CLASS-350-310	US-PATENT-CLASS-263-48	
	US-PATENT-3,427,097	US-PATENT-3,430,937	
c15 N69-24322	NASA-CASE-XMS-01108	NASA-CASE-XLA-04556	
	US-PATENT-APPL-SN-432032	US-PATENT-APPL-SN-607608	
	US-PATENT-CLASS-156-242	US-PATENT-CLASS-250-83	
	US-PATENT-3,425,885	US-PATENT-3,433,953	
c07 N69-24323	NASA-CASE-XGS-02816	NASA-CASE-XGS-02401	
	US-PATENT-APPL-SN-521998	US-PATENT-APPL-SN-502740	
	US-PATENT-CLASS-333-73	US-PATENT-CLASS-250-203	
	US-PATENT-3,437,959	US-PATENT-3,428,812	
c09 N69-24324	NASA-CASE-XGS-02171	NASA-CASE-XAC-11225	
	US-PATENT-APPL-SN-590159	US-PATENT-APPL-SN-638707	
	US-PATENT-CLASS-325-446	US-PATENT-CLASS-248-18	
	US-PATENT-3,437,935	US-PATENT-3,430,902	
c09 N69-24329	NASA-CASE-XNP-04183	NASA-CASE-XGS-05533	
	US-PATENT-APPL-SN-546142	US-PATENT-APPL-SN-568346	
	US-PATENT-CLASS-179-100.2	US-PATENT-CLASS-195-68	
	US-PATENT-3,428,761	US-PATENT-3,437,560	
c09 N69-24330	NASA-CASE-XMS-05307	NASA-CASE-XIA-02854	
	US-PATENT-APPL-SN-516154	US-PATENT-APPL-SN-598118	
	US-PATENT-CLASS-330-29	US-PATENT-CLASS-285-3	
	US-PATENT-3,428,910	US-PATENT-3,427,047	
c14 N69-24331	NASA-CASE-XNP-03930	NASA-CASE-XGS-04480	
	US-PATENT-APPL-SN-526665	US-PATENT-APPL-SN-591007	
	US-PATENT-CLASS-250-237	US-PATENT-CLASS-250-199	
	US-PATENT-3,435,246	US-PATENT-3,433,960	
c23 N69-24332	NASA-CASE-XNP-02340	NASA-CASE-XMS-12158-1	
	US-PATENT-APPL-SN-439490	US-PATENT-APPL-SN-762936	
	US-PATENT-CLASS-350-1	US-PATENT-CLASS-244-1	
	US-PATENT-3,427,089	US-PATENT-3,439,886	
c09 N69-24333	NASA-CASE-XNP-09225	NASA-CASE-XNP-09228	
	US-PATENT-APPL-SN-640785	US-PATENT-APPL-SN-584070	
	US-PATENT-CLASS-340-172.5	US-PATENT-CLASS-307-136	
	US-PATENT-3,431,559	US-PATENT-3,430,063	
c07 N69-24334	NASA-CASE-XGS-01110	NASA-CASE-XNP-04132	
	US-PATENT-APPL-SN-526664	US-PATENT-APPL-SN-640788	
	US-PATENT-CLASS-333-8	US-PATENT-CLASS-220-55	
	US-PATENT-3,428,919	US-PATENT-3,429,477	
c03 N69-25146	NASA-CASE-XGS-04808	NASA-CASE-XNP-09479	
	US-PATENT-APPL-SN-640781	US-PATENT-APPL-SN-653278	
	US-PATENT-CLASS-321-2	US-PATENT-CLASS-73-49.8	
	US-PATENT-3,437,903	US-PATENT-3,433,079	
c17 N69-25147	NASA-CASE-XLE-10466	NASA-CASE-XNP-09452	
	US-PATENT-APPL-SN-644448	US-PATENT-APPL-SN-640789	
	US-PATENT-CLASS-219-411	US-PATENT-CLASS-267-1	
	US-PATENT-3,427,435	US-PATENT-3,430,942	
c09 N69-27422	NASA-CASE-XLA-04980	NASA-CASE-XLA-09122	
	US-PATENT-APPL-SN-577548	US-PATENT-APPL-SN-619903	
	US-PATENT-CLASS-317-234	US-PATENT-CLASS-64-28	
	US-PATENT-3,432,730	US-PATENT-3,430,460	
c14 N69-27423	NASA-CASE-XAC-02407	NASA-CASE-XMS-04318	
	US-PATENT-APPL-SN-469013	US-PATENT-APPL-SN-521996	
	US-PATENT-CLASS-324-43	US-PATENT-CLASS-219-347	
	US-PATENT-3,437,919	US-PATENT-3,431,397	
c14 N69-27431	NASA-CASE-XNP-01483	NASA-CASE-NPO-10714	
	US-PATENT-APPL-SN-635325	US-PATENT-APPL-SN-817569	
	US-PATENT-CLASS-339-17	US-PATENT-APPL-SN-825253	
	US-PATENT-3,430,182	US-PATENT-CLASS-10120	
c14 N69-27432	NASA-CASE-XGS-08266	US-PATENT-APPL-SN-827597	
	US-PATENT-APPL-SN-628248	US-PATENT-APPL-SN-03873	
	US-PATENT-CLASS-250-203	US-PATENT-APPL-SN-543774	
	US-PATENT-3,433,961	US-PATENT-CLASS-73-24	
c14 N69-27459	NASA-CASE-XMS-05909-1	US-PATENT-3,429,177	

ACCESSION NUMBER INDEX

c09 N69-39734	NASA-CASE-IXP-04238	US-PATENT-APPL-SN-590145
	US-PATENT-APPL-SN-562443	US-PATENT-CLASS-250-209
	US-PATENT-CLASS-339-95	US-PATENT-3,444,380
	US-PATENT-3,458,851	NASA-CASE-XIA-06095
c15 N69-39735	NASA-CASE-IGS-00963	US-PATENT-APPL-SN-683612
	US-PATENT-APPL-SN-494282	US-PATENT-CLASS-244-138
	US-PATENT-CLASS-161-182	US-PATENT-3,443,779
	US-PATENT-3,453,172	NASA-CASE-XGS-01725
c07 N69-39736	NASA-CASE-IXP-04180	US-PATENT-APPL-SN-483891
	US-PATENT-APPL-SN-545228	US-PATENT-CLASS-250-49.5
	US-PATENT-CLASS-250-203	US-PATENT-3,446,960
	US-PATENT-3,448,273	NASA-CASE-XLE-02083
c14 N69-39785	NASA-CASE-IKS-03495	US-PATENT-APPL-SN-568362
	US-PATENT-APPL-SN-559351	US-PATENT-CLASS-310-11
	US-PATENT-CLASS-324-61	US-PATENT-3,453,466
	US-PATENT-3,426,272	NASA-CASE-XIA-08500
c15 N69-39786	NASA-CASE-XGS-04554	US-PATENT-APPL-SN-632154
	US-PATENT-APPL-SN-584072	US-PATENT-CLASS-321-11
	US-PATENT-CLASS-29-472.9	US-PATENT-3,434,033
	US-PATENT-3,447,233	NASA-CASE-XMS-05562-1
c25 N69-39884	NASA-CASE-XLE-00690	US-PATENT-APPL-SN-529609
	US-PATENT-APPL-SN-489442	US-PATENT-CLASS-330-2
	US-PATENT-CLASS-324-33	US-PATENT-3,434,064
	US-PATENT-3,447,071	NASA-CASE-XMS-04215-1
c09 N69-39885	NASA-CASE-IMS-04061-1	US-PATENT-APPL-SN-605102
	US-PATENT-APPL-SN-511564	US-PATENT-CLASS-307-265
	US-PATENT-CLASS-328-116	US-PATENT-3,446,992
	US-PATENT-3,456,201	NASA-CASE-XLE-02624
c10 N69-39888	NASA-CASE-IXP-02713	US-PATENT-APPL-SN-635327
	US-PATENT-APPL-SN-528031	US-PATENT-CLASS-35-49
	US-PATENT-CLASS-307-252	US-PATENT-3,429,058
	US-PATENT-3,458,726	NASA-CASE-EEC-10208
c06 N69-39889	NASA-CASE-XLE-07087	US-PATENT-APPL-SN-847596
	US-PATENT-APPL-SN-619521	NASA-CASE-EEC-10072
	US-PATENT-CLASS-313-231	US-PATENT-APPL-SN-845972
	US-PATENT-3,447,015	NASA-CASE-NPO-10863
c03 N69-39890	NASA-CASE-XLE-02824	US-PATENT-APPL-SN-848325
	US-PATENT-APPL-SN-487343	NASA-CASE-NPO-10447
	US-PATENT-CLASS-310-10	US-PATENT-APPL-SN-848351
	US-PATENT-3,443,128	NASA-CASE-MSC-12259-1
c18 N69-39895	NASA-CASE-IXP-06508	US-PATENT-APPL-SN-853763
	US-PATENT-APPL-SN-617776	NASA-CASE-NFS-14741
	US-PATENT-CLASS-117-21	US-PATENT-APPL-SN-880247
	US-PATENT-3,446,642	NASA-CASE-IMS-04890-1
c14 N69-39896	NASA-CASE-XAC-02970	US-PATENT-APPL-SN-797057
	US-PATENT-APPL-SN-447930	US-PATENT-CLASS-60-258
	US-PATENT-CLASS-250-217	US-PATENT-3,490,248
	US-PATENT-3,452,872	NASA-CASE-LAR-10367-1
c09 N69-39897	NASA-CASE-XAC-08981	US-PATENT-APPL-SN-864710
	US-PATENT-APPL-SN-634060	NASA-CASE-LAR-10590-1
	US-PATENT-CLASS-317-16	US-PATENT-APPL-SN-21732
	US-PATENT-3,450,946	NASA-CASE-IXP-00447
c03 N69-39898	NASA-CASE-XLE-01015	US-PATENT-APPL-SN-134479
	US-PATENT-APPL-SN-502746	US-PATENT-CLASS-340-198
	US-PATENT-CLASS-310-4	US-PATENT-3,041,587
	US-PATENT-3,446,997	NASA-CASE-XIA-00137
c09 N69-39925	NASA-CASE-IXP-09776	US-PATENT-APPL-SN-8203
	US-PATENT-APPL-SN-617779	US-PATENT-CLASS-93-1
	US-PATENT-CLASS-310-4	US-PATENT-3,010,372
	US-PATENT-3,446,998	NASA-CASE-XIA-00120
c15 N69-39935	NASA-CASE-IXP-08882	US-PATENT-APPL-SN-853984
	US-PATENT-APPL-SN-640784	US-PATENT-CLASS-250-83.3
	US-PATENT-CLASS-220-14	US-PATENT-3,038,077
	US-PATENT-3,446,387	NASA-CASE-XAC-00086
c06 N69-39936	NASA-CASE-IXP-04816	US-PATENT-APPL-SN-824755
	US-PATENT-APPL-SN-578926	US-PATENT-CLASS-340-147
	US-PATENT-CLASS-73-23.1	US-PATENT-3,059,220
	US-PATENT-3,443,416	NASA-CASE-XLE-00020
c14 N69-39937	NASA-CASE-IXP-09750	US-PATENT-APPL-SN-387332
	US-PATENT-APPL-SN-632162	US-PATENT-CLASS-253-39.15
	US-PATENT-CLASS-250-83	US-PATENT-3,011,760
	US-PATENT-3,456,112	NASA-CASE-XLE-00103
c07 N69-39974	NASA-CASE-XGS-05918	US-PATENT-APPL-SN-517100
	US-PATENT-APPL-SN-685497	US-PATENT-CLASS-60-39.74
	US-PATENT-CLASS-343-7.5	US-PATENT-2,940,259
	US-PATENT-3,430,237	NASA-CASE-XIA-00165
c14 N69-39975	NASA-CASE-XIA-01781	US-PATENT-APPL-SN-47120
	US-PATENT-APPL-SN-441936	US-PATENT-CLASS-244-117
	US-PATENT-CLASS-73-86	US-PATENT-3,028,128
	US-PATENT-3,425,268	NASA-CASE-XIA-00062
c07 N69-39978	NASA-CASE-XGS-02749	US-PATENT-APPL-SN-853

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-253-39.15		US-PATENT-3,130,940
	US-PATENT-3,057,597		NASA-CASE-XLE-00267
c28 N70-33265	NASA-CASE-XLE-00817		US-PATENT-APPL-SN-58147
	US-PATENT-APPL-SN-264735		US-PATENT-CLASS-60-35.5
	US-PATENT-CLASS-60-35.3		US-PATENT-3,016,693
	US-PATENT-3,173,246		NASA-CASE-XLE-00037
c02 N70-33266	NASA-CASE-XLA-00221		US-PATENT-APPL-SN-639589
	US-PATENT-APPL-SN-51473		US-PATENT-CLASS-253-39.15
	US-PATENT-CLASS-244-46		US-PATENT-2,974,925
	US-PATENT-3,064,928		NASA-CASE-XLA-00154
c25 N70-33267	NASA-CASE-XLA-00675		US-PATENT-APPL-SN-31242
	US-PATENT-APPL-SN-178213		US-PATENT-CLASS-60-35.6
	US-PATENT-CLASS-315-111		US-PATENT-3,012,400
	US-PATENT-3,171,060		NASA-CASE-XLE-00207
c11 N70-33278	NASA-CASE-XLE-00168		US-PATENT-APPL-SN-180370
	US-PATENT-APPL-SN-842170		US-PATENT-CLASS-60-35.6
	US-PATENT-CLASS-73-116		US-PATENT-3,173,251
	US-PATENT-3,063,291		NASA-CASE-XLE-00101
c21 N70-33279	NASA-CASE-XFP-00181		US-PATENT-APPL-SN-551961
	US-PATENT-APPL-SN-28175		US-PATENT-CLASS-251-173
	US-PATENT-CLASS-244-83		US-PATENT-2,945,667
	US-PATENT-3,028,126		NASA-CASE-XLE-00010
c17 N70-33283	NASA-CASE-XLE-00151		US-PATENT-APPL-SN-554899
	US-PATENT-APPL-SN-848481		US-PATENT-CLASS-266-19
	US-PATENT-CLASS-75-171		US-PATENT-2,934,331
	US-PATENT-2,971,837		NASA-CASE-XLA-00113
c28 N70-33284	NASA-CASE-XLE-00078		US-PATENT-APPL-SN-2792
	US-PATENT-APPL-SN-18776		US-PATENT-CLASS-73-147
	US-PATENT-CLASS-60-35.6		US-PATENT-3,001,395
	US-PATENT-3,049,876		NASA-CASE-XLE-00212
c05 N70-33285	NASA-CASE-XLA-00118		US-PATENT-APPL-SN-151598
	US-PATENT-APPL-SN-840983		US-PATENT-CLASS-310-4
	US-PATENT-CLASS-5-345		US-PATENT-3,202,844
	US-PATENT-3,038,175		NASA-CASE-XLA-00686
c02 N70-33286	NASA-CASE-XLA-00142		US-PATENT-APPL-SN-195447
	US-PATENT-APPL-SN-26375		US-PATENT-CLASS-343-833
	US-PATENT-CLASS-244-46		US-PATENT-3,202,998
	US-PATENT-3,028,122		NASA-CASE-XLE-00266
c11 N70-33287	NASA-CASE-XLA-00112		US-PATENT-APPL-SN-202024
	US-PATENT-APPL-SN-843022		US-PATENT-CLASS-73-15
	US-PATENT-CLASS-73-147		US-PATENT-3,204,447
	US-PATENT-3,005,339		NASA-CASE-XFP-00517
c17 N70-33288	NASA-CASE-XLE-02428		US-PATENT-APPL-SN-216711
	US-PATENT-APPL-SN-339821		US-PATENT-CLASS-244-1
	US-PATENT-CLASS-29-198		US-PATENT-3,204,889
	US-PATENT-3,170,773		NASA-CASE-XGS-00359
c12 N70-33305	NASA-CASE-XLA-00229		US-PATENT-APPL-SN-94952
	US-PATENT-APPL-SN-18780		US-PATENT-CLASS-250-203
	US-PATENT-CLASS-114-66.5		US-PATENT-3,205,361
	US-PATENT-3,016,863		NASA-CASE-XFP-03856
c15 N70-33311	NASA-CASE-XLE-00046		US-PATENT-APPL-SN-416941
	US-PATENT-APPL-SN-686796		US-PATENT-CLASS-248-188.9
	US-PATENT-CLASS-29-488		US-PATENT-3,208,707
	US-PATENT-3,008,229		NASA-CASE-XLA-01804
c09 N70-33312	NASA-CASE-XLA-00141		US-PATENT-APPL-SN-353637
	US-PATENT-APPL-SN-19971		US-PATENT-CLASS-244-50
	US-PATENT-CLASS-219-34		US-PATENT-3,208,694
	US-PATENT-3,005,081		NASA-CASE-XLA-00203
c14 N70-33322	NASA-CASE-XLA-00135		US-PATENT-APPL-SN-227682
	US-PATENT-APPL-SN-861152		US-PATENT-CLASS-73-105
	US-PATENT-CLASS-244-14		US-PATENT-3,208,272
	US-PATENT-3,004,735		NASA-CASE-XFP-01544
c15 N70-33323	NASA-CASE-XFP-00341		US-PATENT-APPL-SN-394638
	US-PATENT-APPL-SN-77256		US-PATENT-CLASS-60-35.55
	US-PATENT-CLASS-62-45		US-PATENT-3,208,215
	US-PATENT-3,012,407		NASA-CASE-XLE-01783
c11 N70-33325	NASA-CASE-XLA-00119		US-PATENT-APPL-SN-313132
	US-PATENT-APPL-SN-842171		US-PATENT-CLASS-60-35.5
	US-PATENT-CLASS-240-1.2		US-PATENT-3,210,927
	US-PATENT-2,984,735		NASA-CASE-XFP-00389
c15 N70-33330	NASA-CASE-XLE-00023		US-PATENT-APPL-SN-151114
	US-PATENT-APPL-SN-512352		US-PATENT-CLASS-244-1
	US-PATENT-CLASS-78-1		US-PATENT-3,202,381
	US-PATENT-2,991,671		NASA-CASE-XLA-00166
c28 N70-33331	NASA-CASE-XLA-00105		US-PATENT-APPL-SN-84961
	US-PATENT-APPL-SN-719173		US-PATENT-CLASS-244-46
	US-PATENT-CLASS-60-35.6		US-PATENT-3,087,692
	US-PATENT-3,001,363		NASA-CASE-XLE-00288
c02 N70-33332	NASA-CASE-XLA-00087		US-PATENT-APPL-SN-118200
	US-PATENT-APPL-SN-811509		US-PATENT-CLASS-62-50
	US-PATENT-CLASS-244-12		US-PATENT-3,068,658
	US-PATENT-2,991,961		NASA-CASE-XLE-00818
c03 N70-33343	NASA-CASE-XLA-00115		US-PATENT-APPL-SN-253006
	US-PATENT-APPL-SN-847027		US-PATENT-CLASS-60-35.5
	US-PATENT-CLASS-244-1		US-PATENT-3,184,915
	US-PATENT-3,001,739		NASA-CASE-XFP-00375
c33 N70-33344	NASA-CASE-XMS-00486		US-PATENT-APPL-SN-166964
	US-PATENT-APPL-SN-300113		US-PATENT-CLASS-72-56
	US-PATENT-CLASS-244-1		US-PATENT-3,188,844

ACCESSION NUMBER INDEX

c28 N70-34294	NASA-CASE-XLE-00208 US-PATENT-APPL-SN-106135 US-PATENT-CLASS-60-35,54 US-PATENT-3,132,476	c11 N70-34786	OS-PATENT-3,193,883 NASA-CASE-XLA-00493 US-PATENT-APPL-SN-204029 US-PATENT-CLASS-73-432
c21 N70-34295	NASA-CASE-XLA-01989 US-PATENT-APPL-SN-305020 US-PATENT-CLASS-244-1 US-PATENT-3,189,299	c08 N70-34787	US-PATENT-3,196,690 NASA-CASE-IGS-00689 US-PATENT-APPL-SN-250451 US-PATENT-CLASS-235-176
c31 N70-34296	NASA-CASE-XLA-00678 US-PATENT-APPL-SN-197551 US-PATENT-CLASS-244-1 US-PATENT-3,169,725	c28 N70-34788	US-PATENT-3,196,261 NASA-CASE-XLE-00388 US-PATENT-APPL-SN-234568 US-PATENT-CLASS-55-306
c21 N70-34297	NASA-CASE-IGS-00466 US-PATENT-APPL-SN-123597 US-PATENT-CLASS-250-83.3 US-PATENT-3,188,472	c14 N70-34794	US-PATENT-3,196,598 NASA-CASE-XMF-00479 US-PATENT-APPL-SN-169977 US-PATENT-CLASS-73-71.2
c14 N70-34298	NASA-CASE-XMF-00462 US-PATENT-APPL-SN-148001 US-PATENT-CLASS-88-14 US-PATENT-3,185,023	c14 N70-34799	US-PATENT-3,194,060 NASA-CASE-XLA-00492 US-PATENT-APPL-SN-284265 US-PATENT-CLASS-73-88.5
c22 N70-34501	NASA-CASE-XLE-00298 US-PATENT-APPL-SN-277402 US-PATENT-CLASS-176-35 US-PATENT-3,198,709	c33 N70-34812	US-PATENT-3,199,340 NASA-CASE-XLE-00387 US-PATENT-APPL-SN-203411 US-PATENT-CLASS-219-19
c09 N70-34502	NASA-CASE-XMF-00421 US-PATENT-APPL-SN-197548 US-PATENT-CLASS-317-140 US-PATENT-3,189,794	c14 N70-34813	US-PATENT-3,108,171 NASA-CASE-XAC-00073 US-PATENT-APPL-SN-47122 US-PATENT-CLASS-73-147
c21 N70-34535	NASA-CASE-XMF-00185 US-PATENT-APPL-SN-97112 US-PATENT-CLASS-244-76 US-PATENT-3,070,330	c15 N70-34814	US-PATENT-3,100,990 NASA-CASE-XMF-00392 US-PATENT-APPL-SN-151112 US-PATENT-CLASS-219-137
c33 N70-34540	NASA-CASE-XLA-00330 US-PATENT-APPL-SN-264729 US-PATENT-CLASS-219-121 US-PATENT-3,201,560	c11 N70-34815	US-PATENT-3,102,948 NASA-CASE-XAC-00399 US-PATENT-APPL-SN-134481 US-PATENT-CLASS-35-12
c33 N70-34545	NASA-CASE-XLE-00490 US-PATENT-APPL-SN-252259 US-PATENT-CLASS-219-347 US-PATENT-3,189,726	c14 N70-34816	US-PATENT-3,196,557 NASA-CASE-XAC-00042 US-PATENT-APPL-SN-734805 US-PATENT-CLASS-73-398
c09 N70-34559	NASA-CASE-LAR-10218-1 US-PATENT-APPL-SN-47441 US-PATENT-CLASS-137-340 US-PATENT-3,158,172	c15 N70-34817	US-PATENT-3,022,672 NASA-CASE-XAC-00074 US-PATENT-APPL-SN-47123 US-PATENT-CLASS-137-340
c22 N70-34572	NASA-CASE-XLE-00321 US-PATENT-APPL-SN-134478 US-PATENT-CLASS-176-52 US-PATENT-3,202,582	c14 N70-34818	US-PATENT-3,158,172 NASA-CASE-XLE-00503 US-PATENT-APPL-SN-261912 US-PATENT-CLASS-73-136
c09 N70-34596	NASA-CASE-XMF-00324 US-PATENT-APPL-SN-109789 US-PATENT-CLASS-339-176 US-PATENT-3,189,864	c09 N70-34819	US-PATENT-3,196,675 NASA-CASE-IGS-00381 US-PATENT-APPL-SN-104188 US-PATENT-CLASS-307-88.5
c03 N70-34646	NASA-CASE-NPO-11138 US-PATENT-APPL-SN-9251 US-PATENT-CLASS-176-19 US-PATENT-3,205,141	c14 N70-34820	US-PATENT-3,085,165 NASA-CASE-XAC-00030 US-PATENT-APPL-SN-760819 US-PATENT-CLASS-73-401
c25 N70-34661	NASA-CASE-XLA-00147 US-PATENT-APPL-SN-178215 US-PATENT-CLASS-313-156 US-PATENT-3,201,635	c11 N70-34844	US-PATENT-3,024,659 NASA-CASE-XLE-00252 US-PATENT-APPL-SN-144803 US-PATENT-CLASS-73-116
c15 N70-34664	NASA-CASE-XMF-00515 US-PATENT-APPL-SN-278790 US-PATENT-CLASS-308-9 US-PATENT-3,199,931	c15 N70-34850	US-PATENT-3,199,343 NASA-CASE-XLA-00754 US-PATENT-APPL-SN-209479 US-PATENT-CLASS-244-100
c03 N70-34667	NASA-CASE-XLA-00326 US-PATENT-APPL-SN-318443 US-PATENT-CLASS-89-1 US-PATENT-3,200,706	c02 N70-34856	US-PATENT-3,143,321 NASA-CASE-XAC-00139 US-PATENT-APPL-SN-168560 US-PATENT-CLASS-244-51
c14 N70-34669	NASA-CASE-XLE-00724 US-PATENT-APPL-SN-284757 US-PATENT-CLASS-176-19 US-PATENT-3,205,141	c02 N70-34858	US-PATENT-3,144,999 NASA-CASE-XLA-00806 US-PATENT-APPL-SN-26375 US-PATENT-APPL-SN-181828
c08 N70-34675	NASA-CASE-XNP-04162-1 US-PATENT-APPL-SN-872664 US-PATENT-CLASS-244-46 US-PATENT-3,170,657	c15 N70-34859	US-PATENT-3,170,657 NASA-CASE-XLE-00715 US-PATENT-APPL-SN-212174 US-PATENT-CLASS-251-333
c14 N70-34697	NASA-CASE-NPO-11106 US-PATENT-APPL-SN-15020 US-PATENT-CLASS-10682 US-PATENT-APPL-SN-15023	c28 N70-34860	US-PATENT-3,191,907 NASA-CASE-XLE-00144 US-PATENT-APPL-SN-177684 US-PATENT-CLASS-60-35.6
c15 N70-34699	NASA-CASE-NPO-10682 US-PATENT-APPL-SN-15023 US-PATENT-CLASS-244-46 US-PATENT-3,120,101	c15 N70-34861	US-PATENT-3,120,101 NASA-CASE-XLE-00810 US-PATENT-APPL-SN-249540 US-PATENT-CLASS-188-1
c14 N70-34705	NASA-CASE-XMF-00456 US-PATENT-APPL-SN-298800 US-PATENT-CLASS-73-88.5 US-PATENT-3,212,325	c06 N70-34946	US-PATENT-3,164,222 NASA-CASE-XMF-00733 US-PATENT-APPL-SN-256484
c08 N70-34743	NASA-CASE-IGS-00174 US-PATENT-APPL-SN-120803 US-PATENT-CLASS-307-88 US-PATENT-3,198,955		
c08 N70-34778	NASA-CASE-XLA-00471 US-PATENT-APPL-SN-197553 US-PATENT-CLASS-235-154 US-PATENT-3,194,951		
c27 N70-34783	NASA-CASE-XLA-00304 US-PATENT-APPL-SN-54552 US-PATENT-CLASS-18-39		

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-62-15		US-PATENT-APPL-SN-173981
	US-PATENT-3,192,730		US-PATENT-CLASS-324-33
c31 N70-34566	NASA-CASE-XPR-00929		US-PATENT-3,171,081
	US-PATENT-APPL-SN-290868	c15 N70-35679	NASA-CASE-MSC-12279-1
	US-PATENT-CLASS-35-12		US-PATENT-APPL-SN-24154
c15 N70-34967	US-PATENT-3,191,316	c18 N70-36400	NASA-CASE-XMS-00259
	NASA-CASE-XNP-00595		US-PATENT-APPL-SN-145007
	US-PATENT-APPL-SN-188594		US-PATENT-CLASS-117-69
	US-PATENT-CLASS-204-298		US-PATENT-3,157,529
c15 N70-35087	US-PATENT-3,189,535	c15 N70-36409	NASA-CASE-XLA-00482
	NASA-CASE-XGS-00587		US-PATENT-APPL-SN-166970
	US-PATENT-APPL-SN-313135		US-PATENT-CLASS-29-423
	US-PATENT-CLASS-137-340		US-PATENT-3,160,950
	US-PATENT-3,211,169	c31 N70-36410	NASA-CASE-XNP-00641
c21 N70-35089	NASA-CASE-XNP-00438		US-PATENT-APPL-SN-221945
	US-PATENT-APPL-SN-180381		US-PATENT-CLASS-244-1
	US-PATENT-CLASS-250-203		US-PATENT-3,158,336
	US-PATENT-3,205,362	c15 N70-36411	NASA-CASE-XLE-00164
c05 N70-35152	NASA-CASE-XMS-01240		US-PATENT-APPL-SN-107870
	US-PATENT-APPL-SN-331324		US-PATENT-CLASS-60-39.66
	US-PATENT-CLASS-297-216		US-PATENT-3,162,012
	US-PATENT-3,165,356	c15 N70-36412	NASA-CASE-XLE-00170
c09 N70-35219	NASA-CASE-XNP-00611		US-PATENT-APPL-SN-232914
	US-PATENT-APPL-SN-140443		US-PATENT-CLASS-253-66
	US-PATENT-CLASS-343-781		US-PATENT-3,164,369
	US-PATENT-3,209,360	c15 N70-36492	NASA-CASE-XLE-00397
c14 N70-35220	NASA-CASE-XNP-00449		US-PATENT-APPL-SN-195346
	US-PATENT-APPL-SN-118169		US-PATENT-CLASS-137-614
	US-PATENT-CLASS-330-49		US-PATENT-3,170,486
	US-PATENT-3,160,825	c05 N70-36493	NASA-CASE-XMS-00864
c14 N70-35368	NASA-CASE-XLE-00335		US-PATENT-APPL-SN-258932
	US-PATENT-APPL-SN-197554		US-PATENT-CLASS-9-316
	US-PATENT-CLASS-73-15.6		US-PATENT-3,152,344
	US-PATENT-3,176,499	c09 N70-36494	NASA-CASE-XNP-00369
c28 N70-35381	NASA-CASE-XHQ-01897		US-PATENT-APPL-SN-134782
	US-PATENT-APPL-SN-129579		US-PATENT-CLASS-339-176
	US-PATENT-CLASS-60-35.6		US-PATENT-3,149,897
	US-PATENT-3,121,309	c15 N70-36535	NASA-CASE-XLE-00303
c09 N70-35382	NASA-CASE-XNP-00540		US-PATENT-APPL-SN-182692
	US-PATENT-APPL-SN-140509		US-PATENT-CLASS-60-35.6
	US-PATENT-CLASS-343-781		US-PATENT-3,170,286
	US-PATENT-3,212,096	c32 N70-36536	NASA-CASE-XLA-00204
c11 N70-35383	NASA-CASE-XNP-00580		US-PATENT-APPL-SN-189648
	US-PATENT-APPL-SN-343425		US-PATENT-CLASS-135-1
	US-PATENT-CLASS-248-119		US-PATENT-3,170,471
	US-PATENT-3,194,525	c17 N70-36616	NASA-CASE-XLE-00283
c14 N70-35394	NASA-CASE-XNP-00708		US-PATENT-APPL-SN-107866
	US-PATENT-APPL-SN-281069		US-PATENT-CLASS-75-171
	US-PATENT-CLASS-35-45		US-PATENT-3,167,426
	US-PATENT-3,196,558	c33 N70-36617	NASA-CASE-XLA-01291
c21 N70-35395	NASA-CASE-XNP-00465		US-PATENT-APPL-SN-277961
	US-PATENT-APPL-SN-180379		US-PATENT-CLASS-244-1
	US-PATENT-CLASS-244-1		US-PATENT-3,176,933
	US-PATENT-3,206,141	c14 N70-36618	NASA-CASE-XLE-00143
c15 N70-35407	NASA-CASE-XLE-00815		US-PATENT-APPL-SN-104187
	US-PATENT-APPL-SN-300712		US-PATENT-CLASS-324-61
	US-PATENT-CLASS-251-11		US-PATENT-3,176,222
	US-PATENT-3,211,414	c31 N70-36654	NASA-CASE-XNP-02853
c03 N70-35408	NASA-CASE-XGS-01593		US-PATENT-APPL-SN-360182
	US-PATENT-APPL-SN-178721		US-PATENT-CLASS-244-100
	US-PATENT-CLASS-310-5		US-PATENT-3,175,789
	US-PATENT-3,205,381	c03 N70-36778	NASA-CASE-XLA-00838
c15 N70-35409	NASA-CASE-XHQ-01208		US-PATENT-APPL-SN-192016
	US-PATENT-APPL-SN-42022		US-PATENT-CLASS-9-8
	US-PATENT-CLASS-121-38		US-PATENT-3,150,387
	US-PATENT-3,088,441	c28 N70-36802	NASA-CASE-XNP-00923
c28 N70-35422	NASA-CASE-LBW-10814-1		US-PATENT-APPL-SN-264736
	US-PATENT-APPL-SN-38262		US-PATENT-CLASS-60-35.5
c08 N70-35423	NASA-CASE-XNP-00432		US-PATENT-3,159,967
	US-PATENT-APPL-SN-127234	c03 N70-36803	NASA-CASE-XNP-00644
	US-PATENT-CLASS-340-347		US-PATENT-APPL-SN-212496
	US-PATENT-3,172,097		US-PATENT-CLASS-310-11
c09 N70-35425	NASA-CASE-XNP-00683		US-PATENT-3,158,764
	US-PATENT-APPL-SN-251451	c02 N70-36804	NASA-CASE-XLA-00898
	US-PATENT-CLASS-343-781		US-PATENT-APPL-SN-227683
	US-PATENT-3,209,361		US-PATENT-CLASS-244-152
c21 N70-35427	NASA-CASE-XGS-00809		US-PATENT-3,170,660
	US-PATENT-APPL-SN-85585	c26 N70-36805	NASA-CASE-XLA-00158
	US-PATENT-CLASS-88-1		US-PATENT-APPL-SN-221637
	US-PATENT-3,083,611		US-PATENT-CLASS-23-208
c09 N70-35440	NASA-CASE-XAC-00435		US-PATENT-3,174,827
	US-PATENT-APPL-SN-164428	c28 N70-36806	NASA-CASE-XLE-00145
	US-PATENT-CLASS-330-14		US-PATENT-APPL-SN-173081
	US-PATENT-3,196,362		US-PATENT-CLASS-60-35.6
c27 N70-35534	NASA-CASE-XGS-03556		US-PATENT-3,174,279
	US-PATENT-APPL-SN-94259	c14 N70-36807	NASA-CASE-XLA-00100
	US-PATENT-CLASS-60-35.6		US-PATENT-APPL-SN-534901
	US-PATENT-3,191,379		US-PATENT-CLASS-73-178
c14 N70-35666	NASA-CASE-XNP-00646		US-PATENT-3,168,827

ACCESSION NUMBER INDEX

c14 N70-36808	NASA-CASE-XLE-00301 US-PATENT-APPL-SN-138540 US-PATENT-CLASS-176-19 US-PATENT-3,160,567	US-PATENT-APPL-SN-60531 US-PATENT-CLASS-60-35.5 US-PATENT-3,119,232
c14 N70-36824	NASA-CASE-XLA-00481 US-PATENT-AEFL-SN-120797 US-PATENT-CLASS-73-212 US-PATENT-3,170,324	NASA-CASE-XLA-00138 US-PATENT-APPL-SN-8204 US-PATENT-CLASS-343-18 US-PATENT-3,115,630
c02 N70-36825	NASA-CASE-XLA-01583 US-PATENT-AEFL-SN-327565 US-PATENT-CLASS-244-103 US-PATENT-3,169,001	NASA-CASE-XLA-00241 US-PATENT-APPL-SN-61329 US-PATENT-CLASS-244-1 US-PATENT-3,104,079
c31 N70-36845	NASA-CASE-XNP-02108 US-PATENT-APPL-SN-372727 US-PATENT-CLASS-244-100 US-PATENT-3,181,821	NASA-CASE-XLA-00195 US-PATENT-APPL-SN-60536 US-PATENT-CLASS-244-140 US-PATENT-3,079,113
c33 N70-36846	NASA-CASE-XLA-00189 US-PATENT-APPL-SN-223003 US-PATENT-CLASS-102-49 US-PATENT-3,180,264	NASA-CASE-XLA-00805 US-PATENT-APPL-SN-181829 US-PATENT-CLASS-244-46 US-PATENT-3,120,361
c33 N70-36847	NASA-CASE-XNP-00463 US-PATENT-AEFL-SN-259487 US-PATENT-CLASS-165-96 US-PATENT-3,177,933	NASA-CASE-XLA-00350 US-PATENT-APPL-SN-153266 US-PATENT-CLASS-244-46 US-PATENT-3,104,082
c15 N70-36901	NASA-CASE-XPR-00811 US-PATENT-AEFL-SN-257346 US-PATENT-CLASS-29-234 US-PATENT-3,166,834	NASA-CASE-XLE-00345 US-PATENT-APPL-SN-183978 US-PATENT-CLASS-62-55 US-PATENT-3,122,000
c14 N70-36907	NASA-CASE-XNP-00614 US-PATENT-APPL-SN-247419 US-PATENT-CLASS-33-1 US-PATENT-3,163,935	NASA-CASE-XNP-00217 US-PATENT-APPL-SN-180374 US-PATENT-CLASS-102-49 US-PATENT-3,122,098
c15 N70-36908	NASA-CASE-XNP-00214 US-PATENT-APPL-SN-180377 US-PATENT-CLASS-137-625.69 US-PATENT-3,140,728	NASA-CASE-XNP-00612 US-PATENT-APPL-SN-228507 US-PATENT-CLASS-220-63 US-PATENT-3,123,248
c28 N70-36910	NASA-CASE-XNP-00610 US-PATENT-APPL-SN-211464 US-PATENT-CLASS-60-35.6 US-PATENT-3,170,290	NASA-CASE-XNP-00424 US-PATENT-APPL-SN-159804 US-PATENT-CLASS-73-517 US-PATENT-3,141,340
c07 N70-36911	NASA-CASE-XNP-00748 US-PATENT-AEFL-SN-184649 US-PATENT-CLASS-343-17.2 US-PATENT-3,183,506	NASA-CASE-XLE-00455 US-PATENT-APPL-SN-203409 US-PATENT-CLASS-75-222 US-PATENT-3,141,769
c11 N70-36913	NASA-CASE-XNP-00411 US-PATENT-APPL-SN-158914 US-PATENT-CLASS-73-147 US-PATENT-3,182,496	NASA-CASE-XLE-00231 US-PATENT-APPL-SN-64226 US-PATENT-CLASS-22-203 US-PATENT-3,138,837
c21 N70-36938	NASA-CASE-XNP-00294 US-PATENT-APPL-SN-182696 US-PATENT-CLASS-60-35.5 US-PATENT-3,178,883	NASA-CASE-XLE-00111 US-PATENT-APPL-SN-835152 US-PATENT-CLASS-60-39.48 US-PATENT-3,136,123
c21 N70-36943	NASA-CASE-XLA-00281 US-PATENT-APPL-SN-84962 US-PATENT-CLASS-244-1 US-PATENT-3,180,587	NASA-CASE-XLA-00474 US-PATENT-APPL-SN-209478 US-PATENT-CLASS-343-705 US-PATENT-3,132,342
c25 N70-36946	NASA-CASE-XLA-01354 US-PATENT-AEFL-SN-253774 US-PATENT-CLASS-60-35.5 US-PATENT-3,174,278	NASA-CASE-XNP-00738 US-PATENT-APPL-SN-204015 US-PATENT-CLASS-174-115 US-PATENT-3,106,603
c15 N70-36947	NASA-CASE-XNP-00416 US-PATENT-AEFL-SN-180395 US-PATENT-CLASS-189-36 US-PATENT-3,169,613	NASA-CASE-XNP-00425 US-PATENT-APPL-SN-180396 US-PATENT-CLASS-89-1.7 US-PATENT-3,112,672
c28 N70-37245	NASA-CASE-XLE-00376 US-PATENT-AEFL-SN-139007 US-PATENT-CLASS-60-35.5 US-PATENT-3,156,090	NASA-CASE-XNP-00840 US-PATENT-APPL-SN-269222 US-PATENT-CLASS-267-1 US-PATENT-3,127,157
c31 N70-37924	NASA-CASE-XGS-00260 US-PATENT-APPL-SN-187446 US-PATENT-CLASS-244-1 US-PATENT-3,090,580	NASA-CASE-XNP-00249 US-PATENT-APPL-SN-180391 US-PATENT-CLASS-60-35.6 US-PATENT-3,120,738
c15 N70-37925	NASA-CASE-XLA-00128 US-PATENT-APPL-SN-32496 US-PATENT-CLASS-73-384 US-PATENT-3,093,000	NASA-CASE-XLE-00228 US-PATENT-APPL-SN-64224 US-PATENT-CLASS-29-183.5 US-PATENT-3,084,421
c31 N70-37938	NASA-CASE-XLA-00149 US-PATENT-APPL-SN-847023 US-PATENT-CLASS-244-1 US-PATENT-3,093,346	NASA-CASE-XNS-00583 US-PATENT-APPL-SN-182699 US-PATENT-CLASS-60-35.6 US-PATENT-3,135,089
c02 N70-37939	NASA-CASE-XLE-00222 US-PATENT-APPL-SN-77252 US-PATENT-CLASS-244-113 US-PATENT-3,098,630	NASA-CASE-XLE-00323 US-PATENT-APPL-SN-183977 US-PATENT-CLASS-60-35.6 US-PATENT-3,135,090
c33 N70-37979	NASA-CASE-XLA-00349 US-PATENT-APPL-SN-141220 US-PATENT-CLASS-62-467 US-PATENT-3,090,212	NASA-CASE-XLA-00679 US-PATENT-APPL-SN-213836 US-PATENT-CLASS-188-1 US-PATENT-3,128,845
c28 N70-37980	NASA-CASE-XLE-00342	NASA-CASE-XLE-00243 US-PATENT-APPL-SN-118203

ACCRSSION NUMBER INDEX

	US-PATENT-CLASS-324-106		US-PATENT-3,229,884
	US-PATENT-3,202,915	c28 N70-39925	NASA-CASE-XLE-00660
c15 N70-38603	NASA-CASE-XNP-00450		US-PATENT-APPL-SN-231604
	US-PATENT-APPL-SN-180394		US-PATENT-CLASS-313-11.5
	US-PATENT-CLASS-137-495		US-PATENT-3,229,139
	US-PATENT-3,105,515	c03 N70-39930	NASA-CASE-XLA-00791
c09 N70-38604	NASA-CASE-XGS-00458		US-PATENT-APPL-SN-347960
	US-PATENT-APPL-SN-139006		US-PATENT-CLASS-102-49
	US-PATENT-CLASS-307-88		US-PATENT-3,229,636
	US-PATENT-3,128,389	c28 N70-39931	NASA-CASE-XNP-01104
c15 N70-38620	NASA-CASE-XNP-00476		US-PATENT-APPL-SN-290867
	US-PATENT-APPL-SN-182698		US-PATENT-CLASS-60-39.48
	US-PATENT-CLASS-308-9		US-PATENT-3,229,463
	US-PATENT-3,132,903	c14 N70-40003	NASA-CASE-XGS-01036
c28 N70-38645	NASA-CASE-XNP-00234		US-PATENT-APPL-SN-227692
	US-PATENT-APPL-SN-180382		US-PATENT-CLASS-88-14
	US-PATENT-CLASS-60-35.54		US-PATENT-3,229,568
	US-PATENT-3,139,725	c26 N70-40015	NASA-CASE-XLA-02057
c11 N70-38675	NASA-CASE-XNP-00459		US-PATENT-APPL-SN-320595
	US-PATENT-APPL-SN-180384		US-PATENT-CLASS-23-277
	US-PATENT-CLASS-73-432		US-PATENT-3,230,053
	US-PATENT-3,187,583	c30 N70-40016	NASA-CASE-XGS-00619
c31 N70-38676	NASA-CASE-XLA-00258		US-PATENT-APPL-SN-264728
	US-PATENT-APPL-SN-101029		US-PATENT-CLASS-244-1
	US-PATENT-CLASS-244-1		US-PATENT-3,229,930
	US-PATENT-3,144,219	c15 N70-40062	NASA-CASE-XMS-01624
c28 N70-38710	NASA-CASE-XNP-00148		US-PATENT-APPL-SN-422867
	US-PATENT-APPL-SN-118202		US-PATENT-CLASS-55-408
	US-PATENT-CLASS-60-35.6		US-PATENT-3,224,173
	US-PATENT-3,122,885	c07 N70-40063	NASA-CASE-XMS-00893
c28 N70-38711	NASA-CASE-XLE-00057		US-PATENT-APPL-SN-251449
	US-PATENT-APPL-SN-0914		US-PATENT-CLASS-343-18
	US-PATENT-CLASS-60-35.55		US-PATENT-3,224,001
	US-PATENT-3,080,711	c09 N70-40123	NASA-CASE-XGS-01881
c09 N70-38712	NASA-CASE-XNP-01129		US-PATENT-APPL-SN-155584
	US-PATENT-APPL-SN-273534		US-PATENT-CLASS-324-43
	US-PATENT-CLASS-318-260		US-PATENT-3,218,547
	US-PATENT-3,147,422	c12 N70-40124	NASA-CASE-XLE-01512
c03 N70-38713	NASA-CASE-XGS-00473		US-PATENT-APPL-SN-315096
	US-PATENT-APPL-SN-139012		US-PATENT-CLASS-149-2
	US-PATENT-CLASS-200-39		US-PATENT-3,215,572
	US-PATENT-3,141,932	c08 N70-40125	NASA-CASE-XAC-00404
c09 N70-38995	NASA-CASE-XGS-00131		US-PATENT-APPL-SN-209801
	US-PATENT-APPL-SN-14488		US-PATENT-CLASS-340-347
	US-PATENT-CLASS-331-113		US-PATENT-3,216,007
	US-PATENT-3,150,329	c15 N70-40156	NASA-CASE-XLA-01019
c15 N70-38996	NASA-CASE-XNP-00676		US-PATENT-APPL-SN-282817
	US-PATENT-APPL-SN-290870		US-PATENT-CLASS-248-358
	US-PATENT-CLASS-222-389		US-PATENT-3,224,374
	US-PATENT-3,170,605	c14 N70-40157	NASA-CASE-XLA-00487
c12 N70-38997	NASA-CASE-XNP-00658		US-PATENT-APPL-SN-236748
	US-PATENT-APPL-SN-216710		US-PATENT-CLASS-73-178
	US-PATENT-CLASS-137-1		US-PATENT-3,221,549
	US-PATENT-3,110,318	c15 N70-40180	NASA-CASE-XAC-00472
c09 N70-38998	NASA-CASE-XNP-00431		US-PATENT-APPL-SN-236749
	US-PATENT-APPL-SN-180380		US-PATENT-CLASS-73-142
	US-PATENT-CLASS-340-147		US-PATENT-3,224,263
	US-PATENT-3,100,294	c14 N70-40201	NASA-CASE-XLE-00720
c28 N70-38995	NASA-CASE-XLE-00085		US-PATENT-APPL-SN-302749
	US-PATENT-APPL-SN-25175		US-PATENT-CLASS-73-134
	US-PATENT-CLASS-253-66		US-PATENT-3,221,547
	US-PATENT-3,070,349	c07 N70-40202	NASA-CASE-XNP-00437
c15 N70-38996	NASA-CASE-XNP-00339		US-PATENT-APPL-SN-120795
	US-PATENT-APPL-SN-110591		US-PATENT-CLASS-343-705
	US-PATENT-CLASS-308-9		US-PATENT-3,077,599
	US-PATENT-3,070,407	c14 N70-40203	NASA-CASE-XLE-00702
c18 N70-38997	NASA-CASE-XLE-00353		US-PATENT-APPL-SN-258931
	US-PATENT-APPL-SN-65548		US-PATENT-CLASS-73-116
	US-PATENT-CLASS-252-58		US-PATENT-3,201,980
	US-PATENT-3,072,574	c15 N70-40204	NASA-CASE-XNP-00722
c14 N70-38998	NASA-CASE-XNP-00480		US-PATENT-APPL-SN-347626
	US-PATENT-APPL-SN-144804		US-PATENT-CLASS-226-5C
	US-PATENT-CLASS-248-346		US-PATENT-3,219,250
	US-PATENT-3,069,123	c14 N70-40233	NASA-CASE-XMS-01546
c28 N70-38999	NASA-CASE-XLE-00005		US-PATENT-APPL-SN-386461
	US-PATENT-APPL-SN-718095		US-PATENT-CLASS-222-45
	US-PATENT-CLASS-60-35.6		US-PATENT-3,228,558
	US-PATENT-3,067,573	c09 N70-40234	NASA-CASE-XLE-01716
c09 N70-39915	NASA-CASE-XAC-00060		US-PATENT-APPL-SN-349778
	US-PATENT-APPL-SN-47121		US-PATENT-CLASS-126-270
	US-PATENT-CLASS-200-19		US-PATENT-3,229,682
	US-PATENT-3,076,065	c14 N70-40238	NASA-CASE-XNP-00908
c05 N70-39922	NASA-CASE-XPS-01115		US-PATENT-APPL-SN-241085
	US-PATENT-APPL-SN-277404		US-PATENT-CLASS-250-201
	US-PATENT-CLASS-128-29		US-PATENT-3,229,099
	US-PATENT-3,229,689	c14 N70-40239	NASA-CASE-XLA-00183
c15 N70-39924	NASA-CASE-XNP-00640		US-PATENT-APPL-SN-199202
	US-PATENT-APPL-SN-341467		US-PATENT-CLASS-250-203
	US-PATENT-CLASS-228-50		US-PATENT-3,229,102

ACCESSION NUMBER INDEX

c14 N70-40240	NASA-CASE-XHQ-04106 US-PATENT-APPL-SN-91180 US-PATENT-CLASS-250-105 US-PATENT-3,143,651		
c09 N70-40272	NASA-CASE-XMP-00701 US-PATENT-APPL-SN-261917 US-PATENT-CLASS-307-88.5 US-PATENT-3,218,479	c28 N70-41576	NASA-CASE-XIE-00519 US-PATENT-APPL-SN-249542 US-PATENT-CLASS-313-63 US-PATENT-3,287,582
c14 N70-40273	NASA-CASE-XMP-00637 US-PATENT-APPL-SN-280776 US-PATENT-CLASS-95-58 US-PATENT-3,217,624	c16 N70-41578	NASA-CASE-XGS-01504 US-PATENT-APPL-SN-340113 US-PATENT-CLASS-331-94 US-PATENT-3,287,660
c30 N70-40309	NASA-CASE-XLA-00210 US-PATENT-APPL-SN-82658 US-PATENT-CLASS-343-18 US-PATENT-3,220,004	c32 N70-41579	NASA-CASE-XIE-00620 US-PATENT-APPL-SN-304698 US-PATENT-CLASS-138-119 US-PATENT-3,295,556
c30 N70-40353	NASA-CASE-XMP-03198 US-PATENT-APPL-SN-370134 US-PATENT-CLASS-89-1.7 US-PATENT-3,224,336	c03 N70-41580	NASA-CASE-XLA-04622 US-PATENT-APPL-SN-277833 US-PATENT-CLASS-126-270 US-PATENT-3,295,512
c15 N70-40354	NASA-CASE-XMP-01045 US-PATENT-APPL-SN-355130 US-PATENT-CLASS-188-1 US-PATENT-3,228,492	c05 N70-41581	NASA-CASE-XAC-01404 US-PATENT-APPL-SN-363348 US-PATENT-CLASS-74-471 US-PATENT-3,295,386
c28 N70-40367	NASA-CASE-XLE-00177 US-PATENT-APPL-SN-10812 US-PATENT-CLASS-60-35.3 US-PATENT-3,045,424	c28 N70-41582	NASA-CASE-XMP-01813 US-PATENT-APPL-SN-375674 US-PATENT-CLASS-181-52 US-PATENT-3,270,845
c14 N70-40400	NASA-CASE-XAC-00648 US-PATENT-APPL-SN-216939 US-PATENT-CLASS-73-147 US-PATENT-3,218,850	c18 N70-41583	NASA-CASE-XMP-01030 US-PATENT-APPL-SN-317389 US-PATENT-CLASS-161-115 US-PATENT-3,296,060
c28 N70-41275	NASA-CASE-XMP-01390 US-PATENT-APPL-SN-424157 US-PATENT-CLASS-60-259 US-PATENT-3,300,981	c31 N70-41588	NASA-CASE-XMP-01973 US-PATENT-APPL-SN-375682 US-PATENT-CLASS-244-1 US-PATENT-3,295,790
c05 N70-41297	NASA-CASE-XMS-01492 US-PATENT-APPL-SN-398131 US-PATENT-CLASS-55-35 US-PATENT-3,300,949	c02 N70-41589	NASA-CASE-XMP-01174 US-PATENT-APPL-SN-410341 US-PATENT-CLASS-244-100 US-PATENT-3,295,798
c15 N70-41310	NASA-CASE-XMP-01567 US-PATENT-APPL-SN-448898 US-PATENT-CLASS-248-178 US-PATENT-3,295,808	c25 N70-41628	NASA-CASE-XAC-00319 US-PATENT-APPL-SN-77251 US-PATENT-CLASS-315-111 US-PATENT-3,229,155
c28 N70-41311	NASA-CASE-XMP-00876 US-PATENT-APPL-SN-377784 US-PATENT-CLASS-60-251 US-PATENT-3,298,182	c15 N70-41629	NASA-CASE-XGS-02441 US-PATENT-APPL-SN-411944 US-PATENT-CLASS-285-331 US-PATENT-3,301,578
c05 N70-41329	NASA-CASE-XMS-01615 US-PATENT-APPL-SN-329595 US-PATENT-CLASS-128-2.05 US-PATENT-3,298,362	c02 N70-41630	NASA-CASE-XMS-00907 US-PATENT-APPL-SN-428890 US-PATENT-CLASS-244-138 US-PATENT-3,301,511
c14 N70-41330	NASA-CASE-XLE-00688 US-PATENT-APPL-SN-334672 US-PATENT-CLASS-73-32 US-PATENT-3,298,221	c31 N70-41631	NASA-CASE-XMS-04142 US-PATENT-APPL-SN-422865 US-PATENT-CLASS-244-1 US-PATENT-3,301,507
c07 N70-41331	NASA-CASE-XLA-01400 US-PATENT-APPL-SN-363653 US-PATENT-CLASS-325-65 US-PATENT-3,296,531	c15 N70-41646	NASA-CASE-XLE-01449 US-PATENT-APPL-SN-330209 US-PATENT-CLASS-137-197 US-PATENT-3,295,545
c14 N70-41332	NASA-CASE-XLA-00495 US-PATENT-APPL-SN-269215 US-PATENT-CLASS-324-70 US-PATENT-3,296,526	c14 N70-41647	NASA-CASE-XGS-00769 US-PATENT-APPL-SN-319893 US-PATENT-CLASS-242-55.19 US-PATENT-3,295,782
c14 N70-41366	NASA-CASE-XLA-01353 US-PATENT-APPL-SN-403960 US-PATENT-CLASS-73-147 US-PATENT-3,301,046	c09 N70-41655	NASA-CASE-XMP-00906 US-PATENT-APPL-SN-264731 US-PATENT-CLASS-324-113 US-PATENT-3,287,640
c32 N70-41367	NASA-CASE-XGS-00938 US-PATENT-APPL-SN-392970 US-PATENT-CLASS-214-1 US-PATENT-3,295,699	c09 N70-41675	NASA-CASE-XMS-01315 US-PATENT-APPL-SN-347101 US-PATENT-CLASS-307-88.5 US-PATENT-3,302,040
c32 N70-41370	NASA-CASE-XMP-01962 US-PATENT-APPL-SN-369640 US-PATENT-CLASS-92-94 US-PATENT-3,298,285	c14 N70-41676	NASA-CASE-XGS-01231 US-PATENT-APPL-SN-346356 US-PATENT-CLASS-250-71 US-PATENT-3,302,023
c15 N70-41371	NASA-CASE-XMP-01452 US-PATENT-APPL-SN-356692 US-PATENT-CLASS-29-271 US-PATENT-3,300,847	c11 N70-41677	NASA-CASE-XMP-01772 US-PATENT-APPL-SN-370135 US-PATENT-CLASS-73-116 US-PATENT-3,295,366
c07 N70-41372	NASA-CASE-XLA-01127 US-PATENT-APPL-SN-363654 US-PATENT-CLASS-325-65 US-PATENT-3,300,731	c07 N70-41678	NASA-CASE-XGS-02608 US-PATENT-APPL-SN-456578 US-PATENT-CLASS-343-18 US-PATENT-3,289,205
c31 N70-41373	NASA-CASE-XMS-01906 US-PATENT-APPL-SN-339040 US-PATENT-CLASS-244-1 US-PATENT-3,300,162	c15 N70-41679	NASA-CASE-XLA-01441 US-PATENT-APPL-SN-516151 US-PATENT-CLASS-102-49 US-PATENT-3,302,569
c28 N70-41447	NASA-CASE-XMP-00732	c07 N70-41680	NASA-CASE-XMP-02723 US-PATENT-APPL-SN-371857

ACCESSION NUMBER INDEX

		US-PATENT-CLASS-343-14				US-PATENT-3,304,799
		US-PATENT-3,287,725		c14 N70-41955	.....	NASA-CASE-XNP-02029
c14 N70-41681	.....	NASA-CASE-XAC-02877				US-PATENT-APPL-SN-221276
		US-PATENT-APPL-SN-449902				US-PATENT-CLASS-88-14
		US-PATENT-CLASS-73-30		c14 N70-41957	.....	US-PATENT-3,323,408
		US-PATENT-3,295,360				NASA-CASE-XAC-01101
c14 N70-41682	.....	NASA-CASE-XMS-05936				US-PATENT-APPL-SN-355129
		US-PATENT-APPL-SN-557868				US-PATENT-CLASS-73-141
		US-PATENT-CLASS-73-517		c15 N70-41960	.....	US-PATENT-3,304,173
		US-PATENT-3,295,377				NASA-CASE-XNP-05082
c09 N70-41717	.....	NASA-CASE-XMS-02087				US-PATENT-APPL-SN-521753
		US-PATENT-APPL-SN-439489				US-PATENT-CLASS-174-68.5
		US-PATENT-CLASS-165-1		c08 N70-41961	.....	US-PATENT-3,321,570
		US-PATENT-3,301,315				NASA-CASE-XNP-00911
c14 N70-41807	.....	NASA-CASE-XNP-01472				US-PATENT-APPL-SN-280777
		US-PATENT-APPL-SN-321656				US-PATENT-CLASS-178-67
		US-PATENT-CLASS-178-7.2		c10 N70-41964	.....	US-PATENT-3,305,636
		US-PATENT-3,287,496				NASA-CASE-XGS-01983
c15 N70-41808	.....	NASA-CASE-XMS-02532				US-PATENT-APPL-SN-388023
		US-PATENT-APPL-SN-398132				US-PATENT-CLASS-333-79
		US-PATENT-CLASS-285-27		c28 N70-41967	.....	US-PATENT-3,305,801
		US-PATENT-3,287,031				NASA-CASE-XLA-02651
c15 N70-41811	.....	NASA-CASE-XNP-01152				US-PATENT-APPL-SN-449901
		US-PATENT-APPL-SN-369337				US-PATENT-CLASS-102-49
		US-PATENT-CLASS-137-539		c10 N70-41991	.....	US-PATENT-3,304,865
		US-PATENT-3,302,662				NASA-CASE-XNP-03128
c14 N70-41812	.....	NASA-CASE-XMS-03792				US-PATENT-APPL-SN-397665
		US-PATENT-APPL-SN-516159				US-PATENT-CLASS-250-83.6
		US-PATENT-CLASS-200-61.45		c28 N70-41992	.....	US-PATENT-3,321,628
		US-PATENT-3,303,304				NASA-CASE-XLR-00685
c28 N70-41818	.....	NASA-CASE-XLE-00150				US-PATENT-APPL-SN-407595
		US-PATENT-APPL-SN-843032				US-PATENT-CLASS-60-260
		US-PATENT-CLASS-29-157.3		c15 N70-41993	.....	US-PATENT-3,321,922
		US-PATENT-3,035,333				NASA-CASE-XLR-01300
c05 N70-41819	.....	NASA-CASE-XAC-00405				US-PATENT-APPL-SN-380960
		US-PATENT-APPL-SN-158916				US-PATENT-CLASS-73-100
		US-PATENT-CLASS-128-1		c14 N70-41994	.....	US-PATENT-3,323,356
		US-PATENT-3,302,633				NASA-CASE-XNP-02822
c15 N70-41829	.....	NASA-CASE-XNP-01371				US-PATENT-APPL-SN-403959
		US-PATENT-APPL-SN-353634				US-PATENT-CLASS-73-194
		US-PATENT-CLASS-287-119		c05 N70-42000	.....	US-PATENT-3,323,362
		US-PATENT-3,302,960				NASA-CASE-XMS-03371
c31 N70-41855	.....	NASA-CASE-XNP-02982				US-PATENT-APPL-SN-418931
		US-PATENT-APPL-SN-388966				US-PATENT-CLASS-73-432
		US-PATENT-CLASS-244-1		c32 N70-42003	.....	US-PATENT-3,323,370
		US-PATENT-3,304,028				NASA-CASE-XLA-02131
c21 N70-41856	.....	NASA-CASE-XNP-01307				US-PATENT-APPL-SN-377777
		US-PATENT-APPL-SN-390250				US-PATENT-CLASS-73-90
		US-PATENT-CLASS-244-1		c31 N70-42015	.....	US-PATENT-3,304,768
		US-PATENT-3,286,953				NASA-CASE-XLA-01967
c02 N70-41863	.....	NASA-CASE-XLA-01220				US-PATENT-APPL-SN-457875
		US-PATENT-APPL-SN-379417				US-PATENT-CLASS-244-135
		US-PATENT-CLASS-244-16		c02 N70-42016	.....	US-PATENT-3,321,159
		US-PATENT-3,286,957				NASA-CASE-XLA-01290
c03 N70-41864	.....	NASA-CASE-XGS-01419				US-PATENT-APPL-SN-393451
		US-PATENT-APPL-SN-323182				US-PATENT-CLASS-244-42
		US-PATENT-CLASS-136-179		c15 N70-42017	.....	US-PATENT-3,321,157
		US-PATENT-3,287,174				NASA-CASE-XMS-04072
c31 N70-41871	.....	NASA-CASE-XMS-04390				US-PATENT-APPL-SN-485960
		US-PATENT-APPL-SN-502729				US-PATENT-CLASS-30-228
		US-PATENT-CLASS-62-45		c10 N70-42032	.....	US-PATENT-3,320,669
		US-PATENT-3,304,729				NASA-CASE-XNP-02654
c27 N70-41897	.....	NASA-CASE-XNP-01749				US-PATENT-APPL-SN-435387
		US-PATENT-APPL-SN-440033				US-PATENT-CLASS-307-88.5
		US-PATENT-CLASS-149-109		c15 N70-42033	.....	US-PATENT-3,321,645
		US-PATENT-3,305,415				NASA-CASE-XNP-02092
c28 N70-41922	.....	NASA-CASE-XNP-02839				US-PATENT-APPL-SN-371856
		US-PATENT-APPL-SN-477333				US-PATENT-CLASS-156-345
		US-PATENT-CLASS-60-202		c15 N70-42034	.....	US-PATENT-3,323,967
		US-PATENT-3,304,718				NASA-CASE-XNP-01412
c09 N70-41929	.....	NASA-CASE-XNP-01951				US-PATENT-APPL-SN-426702
		US-PATENT-APPL-SN-413662				US-PATENT-CLASS-175-310
		US-PATENT-CLASS-335-300		c03 N70-42073	.....	US-PATENT-3,321,034
		US-PATENT-3,305,810				NASA-CASE-XNP-04104
c21 N70-41930	.....	NASA-CASE-XNP-01501				US-PATENT-APPL-SN-476759
		US-PATENT-APPL-SN-432027				US-PATENT-CLASS-74-471
		US-PATENT-CLASS-343-12		c14 N70-42074	.....	US-PATENT-3,323,386
		US-PATENT-3,305,861				NASA-CASE-XLR-02998
c14 N70-41946	.....	NASA-CASE-XLE-00011				US-PATENT-APPL-SN-516794
		US-PATENT-APPL-SN-735911				US-PATENT-CLASS-116-117
		US-PATENT-CLASS-88-14		c31 N70-42075	.....	US-PATENT-3,323,484
		US-PATENT-2,960,002				NASA-CASE-XMS-02677
c31 N70-41948	.....	NASA-CASE-XNP-01899				US-PATENT-APPL-SN-470266
		US-PATENT-APPL-SN-428882				US-PATENT-CLASS-244-1
		US-PATENT-CLASS-60-257		c14 N71-10500	.....	US-PATENT-3,321,154
		US-PATENT-3,304,724				NASA-CASE-XLR-01609
c03 N70-41954	.....	NASA-CASE-XAC-03392				US-PATENT-APPL-SN-438797
		US-PATENT-APPL-SN-430776				US-PATENT-CLASS-73-290
		US-PATENT-CLASS-74-519				US-PATENT-3,326,043

ACCESSION NUMBER INDEX

c24 N71-10560 NASA-CASE-XLE-00808
US-PATENT-APPL-SN-307269
US-PATENT-CLASS-148-188
US-PATENT-3,310,443
c28 N71-10574 NASA-CASE-XLE-01902
US-PATENT-APPL-SN-485656
US-PATENT-CLASS-60-202
US-PATENT-3,324,659
c15 N71-10577 NASA-CASE-XLE-04677
US-PATENT-APPL-SN-447928
US-PATENT-CLASS-220-67
US-PATENT-3,326,407
c10 N71-10578 NASA-CASE-XMS-01554
US-PATENT-APPL-SN-414482
US-PATENT-CLASS-323-8
US-PATENT-3,325,723
c31 N71-10582 NASA-CASE-XLA-02132
US-PATENT-APPL-SN-453227
US-PATENT-CLASS-102-49
US-PATENT-3,286,630
c11 N71-10604 NASA-CASE-XMF-03248
US-PATENT-APPL-SN-377780
US-PATENT-CLASS-73-116
US-PATENT-3,310,980
c26 N71-10607 NASA-CASE-XLE-02792
US-PATENT-APPL-SN-352400
US-PATENT-CLASS-148-1.5
US-PATENT-3,311,510
c03 N71-10608 NASA-CASE-XGS-03505
US-PATENT-APPL-SN-498167
US-PATENT-CLASS-136-28
US-PATENT-3,311,502
c07 N71-10609 NASA-CASE-XGS-01223
US-PATENT-APPL-SN-319892
US-PATENT-CLASS-242-55.19
US-PATENT-3,311,315
c14 N71-10616 NASA-CASE-XMF-02433
US-PATENT-APPL-SN-405630
US-PATENT-CLASS-73-70.2
US-PATENT-3,310,978
c15 N71-10617 NASA-CASE-XMF-01887
US-PATENT-APPL-SN-422868
US-PATENT-CLASS-308-5
US-PATENT-3,325,229
c09 N71-10618 NASA-CASE-XMF-03332
US-PATENT-APPL-SN-368123
US-PATENT-CLASS-313-63
US-PATENT-3,311,772
c15 N71-10658 NASA-CASE-XMS-03252
US-PATENT-APPL-SN-425362
US-PATENT-CLASS-60-54.5
US-PATENT-3,318,093
c09 N71-10659 NASA-CASE-XMF-01383
US-PATENT-APPL-SN-369336
US-PATENT-CLASS-324-77
US-PATENT-3,317,832
c15 N71-10672 NASA-CASE-XLA-01091
US-PATENT-APPL-SN-351259
US-PATENT-CLASS-264-102
US-PATENT-3,317,641
c09 N71-10673 NASA-CASE-XGS-01473
US-PATENT-APPL-SN-364867
US-PATENT-CLASS-307-88.5
US-PATENT-3,317,751
c07 N71-10676 NASA-CASE-XMF-03134
US-PATENT-APPL-SN-422095
US-PATENT-CLASS-333-21
US-PATENT-3,324,423
c09 N71-10677 NASA-CASE-XGS-01451
US-PATENT-APPL-SN-405629
US-PATENT-CLASS-318-138
US-PATENT-3,324,370
c21 N71-10678 NASA-CASE-XGS-01159
US-PATENT-APPL-SN-332313
US-PATENT-CLASS-250-203
US-PATENT-3,311,748
c03 N71-10728 NASA-CASE-XMF-01464
US-PATENT-APPL-SN-430778
US-PATENT-CLASS-136-182
US-PATENT-3,317,352
c11 N71-10746 NASA-CASE-XMS-02977
US-PATENT-APPL-SN-416938
US-PATENT-CLASS-35-12
US-PATENT-3,281,963
c31 N71-10747 NASA-CASE-XMF-00442
US-PATENT-APPL-SN-202030
US-PATENT-CLASS-343-705
US-PATENT-3,277,486
c11 N71-10748 NASA-CASE-IPR-04147
US-PATENT-APPL-SN-476761
US-PATENT-CLASS-35-12
US-PATENT-3,281,965
c21 N71-10771 NASA-CASE-XMF-03914
US-PATENT-APPL-SN-468647
US-PATENT-CLASS-250-203
US-PATENT-3,317,731
c18 N71-10772 NASA-CASE-XLE-01765
US-PATENT-APPL-SN-316477
US-PATENT-CLASS-117-65.2
US-PATENT-3,317,341
c14 N71-10773 NASA-CASE-XLA-02605
US-PATENT-APPL-SN-459138
US-PATENT-CLASS-177-210
US-PATENT-3,316,991
c14 N71-10774 NASA-CASE-XLA-01131
US-PATENT-APPL-SN-322545
US-PATENT-CLASS-73-23
US-PATENT-3,312,101
c07 N71-10775 NASA-CASE-XLA-00901
US-PATENT-APPL-SN-269212
US-PATENT-CLASS-325-305
US-PATENT-3,311,832
c11 N71-10776 NASA-CASE-XLA-03127
US-PATENT-APPL-SN-447927
US-PATENT-CLASS-35-12
US-PATENT-3,281,964
c11 N71-10777 NASA-CASE-XLE-01533
US-PATENT-APPL-SN-334678
US-PATENT-CLASS-55-400
US-PATENT-3,282,035
c15 N71-10778 NASA-CASE-XMF-00710
US-PATENT-APPL-SN-271821
US-PATENT-CLASS-251-61
US-PATENT-3,317,180
c14 N71-10779 NASA-CASE-XMF-02307
US-PATENT-APPL-SN-422869
US-PATENT-CLASS-73-40.5
US-PATENT-3,316,752
c28 N71-10780 NASA-CASE-XLA-01043
US-PATENT-APPL-SN-379768
US-PATENT-CLASS-60-225
US-PATENT-3,316,716
c14 N71-10781 NASA-CASE-XLE-01481
US-PATENT-APPL-SN-319905
US-PATENT-CLASS-73-99
US-PATENT-3,282,091
c15 N71-10782 NASA-CASE-XMS-01985
US-PATENT-APPL-SN-357337
US-PATENT-CLASS-285-24
US-PATENT-3,319,979
c14 N71-10797 NASA-CASE-XLE-01246
US-PATENT-APPL-SN-249537
US-PATENT-CLASS-324-61
US-PATENT-3,324,388
c09 N71-10798 NASA-CASE-XMS-00945
US-PATENT-APPL-SN-385530
US-PATENT-CLASS-330-22
US-PATENT-3,319,175
c15 N71-10799 NASA-CASE-XLA-01807
US-PATENT-APPL-SN-442558
US-PATENT-CLASS-287-189.36
US-PATENT-3,318,622
c15 N71-10809 NASA-CASE-XMF-02107
US-PATENT-APPL-SN-384811
US-PATENT-CLASS-140-124
US-PATENT-3,318,343
c02 N71-11037 NASA-CASE-XLA-06824-2
US-PATENT-APPL-SN-375966
US-PATENT-CLASS-244-31
US-PATENT-3,508,724
c02 N71-11038 NASA-CASE-XLA-06958
US-PATENT-APPL-SN-551815
US-PATENT-CLASS-244-44
US-PATENT-3,310,261
c02 N71-11039 NASA-CASE-XSC-12111-1
US-PATENT-APPL-SN-775877
US-PATENT-CLASS-244-23
US-PATENT-3,490,721
c02 N71-11041 NASA-CASE-XLA-03659
US-PATENT-APPL-SN-444087
US-PATENT-CLASS-244-46
US-PATENT-3,270,989
c02 N71-11043 NASA-CASE-XLA-08801-1
US-PATENT-APPL-SN-710533
US-PATENT-CLASS-244-43
US-PATENT-3,493,197
c03 N71-11049 NASA-CASE-NFO-10109
US-PATENT-APPL-SN-701654

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-136-89	c06 N71-11240	NASA-CASE-NFS-13994-1
	US-PATENT-3,532,551		US-PATENT-APPL-SN-715975
c03 N71-11050	NASA-CASE-XNP-06506		US-PATENT-CLASS-260-46.5
	US-PATENT-APEL-SN-577778		US-PATENT-3,516,964
	US-PATENT-CLASS-136-89	c06 N71-11242	NASA-CASE-XMF-08656
	US-PATENT-3,446,676		US-PATENT-APPL-SN-593605
c03 N71-11051	NASA-CASE-XNP-03378		US-PATENT-CLASS-260-2.5
	US-PATENT-APEL-SN-360878		US-PATENT-3,493,524
	US-PATENT-CLASS-136-170	c06 N71-11243	NASA-CASE-XMF-08652
	US-PATENT-3,282,740		US-PATENT-APPL-SN-593606
c03 N71-11052	NASA-CASE-XLE-04526		US-PATENT-CLASS-260-2
	US-PATENT-APEL-SN-640457		US-PATENT-3,493,522
	US-PATENT-CLASS-136-86	c07 N71-11266	NASA-CASE-XIA-03076
	US-PATENT-3,507,704		US-PATENT-APPL-SN-591004
c03 N71-11053	NASA-CASE-XGS-00886		US-PATENT-CLASS-325-42
	US-PATENT-APEL-SN-319894		US-PATENT-3,508,152
	US-PATENT-CLASS-136-132	c07 N71-11267	NASA-CASE-XNP-10843
	US-PATENT-3,282,739		US-PATENT-APPL-SN-649358
c03 N71-11055	NASA-CASE-XMF-05843		US-PATENT-CLASS-325-363
	US-PATENT-APEL-SN-666553		US-PATENT-3,508,156
	US-PATENT-CLASS-310-4	c07 N71-11281	NASA-CASE-XNP-10830
	US-PATENT-3,509,386		US-PATENT-APPL-SN-692332
c03 N71-11056	NASA-CASE-XNP-05821		US-PATENT-CLASS-178-69.5
	US-PATENT-APEL-SN-545223		US-PATENT-3,535,451
	US-PATENT-CLASS-136-89	c07 N71-11282	NASA-CASE-XGS-02889
	US-PATENT-3,493,437		US-PATENT-APPL-SN-685748
c03 N71-11057	NASA-CASE-HSC-13112		US-PATENT-CLASS-329-104
	US-PATENT-APEL-SN-765738		US-PATENT-3,501,704
	US-PATENT-CLASS-290-40	c07 N71-11284	NASA-CASE-XIA-01552
	US-PATENT-3,508,070		US-PATENT-APPL-SN-332339
c03 N71-11058	NASA-CASE-XGS-01475		US-PATENT-CLASS-325-65
	US-PATENT-APEL-SN-344793		US-PATENT-3,277,375
	US-PATENT-CLASS-244-1	c07 N71-11285	NASA-CASE-NPO-10539
	US-PATENT-3,459,391		US-PATENT-APPL-SN-743429
c05 N71-11189	NASA-CASE-XPR-10856		US-PATENT-CLASS-343-779
	US-PATENT-APEL-SN-626376		US-PATENT-3,534,375
	US-PATENT-3,534,727	c07 N71-11298	NASA-CASE-XMF-01160
c05 N71-11190	NASA-CASE-XMS-04935		US-PATENT-APPL-SN-310507
	US-PATENT-APEL-SN-518487		US-PATENT-CLASS-340-198
	US-PATENT-CLASS-128-142.5		US-PATENT-3,243,791
	US-PATENT-3,502,074	c07 N71-11300	NASA-CASE-XMS-07168
c05 N71-11193	NASA-CASE-ABC-10043-1		US-PATENT-APPL-SN-769788
	US-PATENT-APPL-SN-676012		US-PATENT-CLASS-178-6.6
	US-PATENT-CLASS-128-2.1		US-PATENT-3,493,677
	US-PATENT-3,508,541	c21 N71-11766	NASA-CASE-LAE-10403
c05 N71-11194	NASA-CASE-XLA-05332		US-PATENT-APPL-SN-676391
	US-PATENT-APEL-SN-757861		US-PATENT-CLASS-343-6.5
	US-PATENT-CLASS-2-2.1		US-PATENT-3,447,154
	US-PATENT-3,534,407	c01 N71-12217	NASA-CASE-FBC-10063
c05 N71-11195	NASA-CASE-LAR-10007-1		US-PATENT-APPL-SN-21263
	US-PATENT-APPL-SN-770203	c02 N71-12243	NASA-CASE-XLA-04451
	US-PATENT-CLASS-2-2.1		US-PATENT-APPL-SN-457876
	US-PATENT-3,534,406		US-PATENT-CLASS-244-45
c05 N71-11199	NASA-CASE-XKS-02342		US-PATENT-3,310,262
	US-PATENT-APEL-SN-407603	c03 N71-12255	NASA-CASE-FEC-10404
	US-PATENT-CLASS-182-191		US-PATENT-APPL-SN-728234
	US-PATENT-3,262,518		US-PATENT-CLASS-321-2
c05 N71-11202	NASA-CASE-XPR-08403		US-PATENT-3,532,960
	US-PATENT-APPL-SN-704420	c03 N71-12258	NASA-CASE-XLA-00711
	US-PATENT-CLASS-73-23		US-PATENT-APPL-SN-357334
	US-PATENT-3,507,146		US-PATENT-CLASS-89-1.7
c05 N71-11203	NASA-CASE-XMS-09632-1		US-PATENT-3,249,012
	US-PATENT-APPL-SN-791693	c03 N71-12259	NASA-CASE-XIA-01396
	US-PATENT-CLASS-128-142.5		US-PATENT-APPL-SN-357336
	US-PATENT-3,500,827		US-PATENT-CLASS-89-1.7
c05 N71-11207	NASA-CASE-XLA-03213		US-PATENT-3,249,013
	US-PATENT-APPL-SN-621715	c03 N71-12260	NASA-CASE-XMF-01020
	US-PATENT-CLASS-202-182		US-PATENT-APPL-SN-430780
	US-PATENT-3,444,051		US-PATENT-CLASS-60-97
c06 N71-11235	NASA-CASE-XLA-03104		US-PATENT-3,238,730
	US-PATENT-APPL-SN-510155	c05 N71-12335	NASA-CASE-XMS-00784
	US-PATENT-CLASS-260-78		US-PATENT-APPL-SN-358127
	US-PATENT-3,518,232		US-PATENT-CLASS-2-2.1
c06 N71-11236	NASA-CASE-XMF-08651		US-PATENT-3,286,274
	US-PATENT-APPL-SN-593594	c05 N71-12336	NASA-CASE-XMS-05304
	US-PATENT-CLASS-260-72.5		US-PATENT-APPL-SN-511567
	US-PATENT-3,526,611		US-PATENT-CLASS-244-4
c06 N71-11237	NASA-CASE-XMF-10753		US-PATENT-3,270,986
	US-PATENT-APPL-SN-668751	c05 N71-12341	NASA-CASE-FES-14671
	US-PATENT-CLASS-260-46.5		US-PATENT-APPL-SN-723476
	US-PATENT-3,444,127		US-PATENT-CLASS-297-385
c06 N71-11238	NASA-CASE-XLA-08802		US-PATENT-3,516,711
	US-PATENT-APPL-SN-640454	c05 N71-12342	NASA-CASE-IAC-05706
	US-PATENT-CLASS-260-78		US-PATENT-APPL-SN-592694
	US-PATENT-3,532,673		US-PATENT-CLASS-325-143
c06 N71-11239	NASA-CASE-XMF-08655		US-PATENT-3,453,546
	US-PATENT-APPL-SN-593593	c05 N71-12343	NASA-CASE-HSC-11253
	US-PATENT-CLASS-260-72.5		US-PATENT-APPL-SN-695973
	US-PATENT-3,516,970		US-PATENT-CLASS-297-68

ACCESSION NUMBER INDEX

c05 N71-12344	US-PATENT-3,466,085 NASA-CASE-XMS-09636 US-PATENT-APPL-SN-586330 US-PATENT-CLASS-2-2.1 US-PATENT-3,492,672	c09 N71-12517	NASA-CASE-XAC-10608-1 US-PATENT-APPL-SN-710561 US-PATENT-CLASS-333-80 US-PATENT-3,493,501
c05 N71-12345	NASA-CASE-HSC-12086-1 US-PATENT-APPL-SN-812999 US-PATENT-CLASS-29-400 US-PATENT-3,490,130	c09 N71-12518	NASA-CASE-XNP-09808 US-PATENT-APPL-SN-692471 US-PATENT-CLASS-200-61.42 US-PATENT-3,488,461
c05 N71-12346	NASA-CASE-XMS-04212-1 US-PATENT-APPL-SN-607461 US-PATENT-CLASS-128-2.1 US-PATENT-3,490,440	c09 N71-12519	NASA-CASE-XNP-06519 US-PATENT-APPL-SN-656952 US-PATENT-CLASS-328-110 US-PATENT-3,535,644
c05 N71-12351	NASA-CASE-LAR-10056 US-PATENT-APPL-SN-674357 US-PATENT-CLASS-224-25 US-PATENT-3,493,153	c09 N71-12520	NASA-CASE-NFO-10230 US-PATENT-APPL-SN-691735 US-PATENT-CLASS-307-229 US-PATENT-3,535,547
c07 N71-12389	NASA-CASE-XLA-01090 US-PATENT-APPL-SN-741824 US-PATENT-CLASS-250-199 US-PATENT-RE-26,548	c09 N71-12521	NASA-CASE-ARC-10030 US-PATENT-APPL-SN-679885 US-PATENT-CLASS-313-110 US-PATENT-3,493,805
c07 N71-12390	NASA-CASE-XER-09213 US-PATENT-APPL-SN-668302 US-PATENT-CLASS-332-9 US-PATENT-3,535,657	c09 N71-12526	NASA-CASE-HSC-12135-1 US-PATENT-APPL-SN-761404 US-PATENT-CLASS-317-31 US-PATENT-3,448,341
c07 N71-12391	NASA-CASE-XMS-05454-1 US-PATENT-APPL-SN-771803 US-PATENT-CLASS-343-17.7 US-PATENT-3,471,858	c09 N71-12539	NASA-CASE-ERC-10552 US-PATENT-APPL-SN-720125 US-PATENT-CLASS-178-7.7 US-PATENT-3,535,446
c07 N71-12392	NASA-CASE-XGS-01590 US-PATENT-APPL-SN-584067 US-PATENT-CLASS-178-88 US-PATENT-3,491,202	c09 N71-12540	NASA-CASE-XNP-01058 US-PATENT-APPL-SN-313136 US-PATENT-CLASS-315-160 US-PATENT-3,271,620
c07 N71-12396	NASA-CASE-GSC-10452 US-PATENT-APPL-SN-797794 US-PATENT-CLASS-343-776 US-PATENT-3,495,262	c10 N71-12554	NASA-CASE-NPE-10348 US-PATENT-APPL-SN-704668 US-PATENT-CLASS-324-95 US-PATENT-3,532,979
c08 N71-12494	NASA-CASE-XGS-04767 US-PATENT-APPL-SN-645584 US-PATENT-CLASS-307-296 US-PATENT-3,535,560	c01 N71-13410	NASA-CASE-XLA-00755 US-PATENT-APPL-SN-247423 US-PATENT-CLASS-244-45 US-PATENT-3,270,988
c08 N71-12500	NASA-CASE-XNP-07040 US-PATENT-APPL-SN-649357 US-PATENT-CLASS-332-31 US-PATENT-3,535,658	c01 N71-13411	NASA-CASE-XLA-05828 US-PATENT-APPL-SN-509460 US-PATENT-CLASS-235-61.6 US-PATENT-3,500,020
c08 N71-12501	NASA-CASE-XLA-00670 US-PATENT-APPL-SN-235162 US-PATENT-CLASS-340-347 US-PATENT-3,251,053	c02 N71-13421	NASA-CASE-XER-00756 US-PATENT-APPL-SN-212173 US-PATENT-CLASS-235-150.22 US-PATENT-3,258,582
c08 N71-12502	NASA-CASE-NPO-10112 US-PATENT-APPL-SN-673226 US-PATENT-CLASS-340-172.5 US-PATENT-3,533,074	c02 N71-13422	NASA-CASE-XLA-06339 US-PATENT-APPL-SN-801336 US-PATENT-CLASS-244-76 US-PATENT-3,534,930
c08 N71-12503	NASA-CASE-NPO-10351 US-PATENT-APPL-SN-712065 US-PATENT-CLASS-328-37 US-PATENT-3,535,642	c06 N71-13461	NASA-CASE-LAR-10180-1 US-PATENT-APPL-SN-709398 US-PATENT-CLASS-250-41.9 US-PATENT-3,521,054
c08 N71-12504	NASA-CASE-XNP-05835 US-PATENT-APPL-SN-627257 US-PATENT-CLASS-340-174 US-PATENT-3,493,942	c09 N71-13486	NASA-CASE-NPS-20333 US-PATENT-APPL-SN-820965 US-PATENT-CLASS-307-149 US-PATENT-3,535,543
c08 N71-12505	NASA-CASE-XNP-05415 US-PATENT-APPL-SN-578932 US-PATENT-CLASS-340-146.2 US-PATENT-3,493,929	c09 N71-13518	NASA-CASE-HSC-12178-1 US-PATENT-APPL-SN-845365 US-PATENT-CLASS-315-241 US-PATENT-3,530,336
c08 N71-12506	NASA-CASE-XNP-08832 US-PATENT-APPL-SN-681692 US-PATENT-CLASS-340-172.5 US-PATENT-3,535,696	c09 N71-13521	NASA-CASE-XMS-09348 US-PATENT-APPL-SN-677505 US-PATENT-CLASS-343-703 US-PATENT-3,526,897
c08 N71-12507	NASA-CASE-XLA-01952 US-PATENT-APPL-SN-676386 US-PATENT-CLASS-340-324 US-PATENT-3,537,096	c09 N71-13522	NASA-CASE-LBN-10364-1 US-PATENT-APPL-SN-822518 US-PATENT-CLASS-317-258 US-PATENT-3,535,602
c09 N71-12513	NASA-CASE-XGS-07801 US-PATENT-APPL-SN-640452 US-PATENT-CLASS-148-188 US-PATENT-3,490,965	c09 N71-13530	NASA-CASE-XNP-00384 US-PATENT-APPL-SN-180392 US-PATENT-CLASS-324-132 US-PATENT-3,263,171
c09 N71-12514	NASA-CASE-XLA-07497 US-PATENT-APPL-SN-631848 US-PATENT-CLASS-307-252 US-PATENT-3,491,255	c09 N71-13531	NASA-CASE-HSC-12033-1 US-PATENT-APPL-SN-602828 US-PATENT-CLASS-330-11 US-PATENT-3,526,845
c09 N71-12515	NASA-CASE-XNP-08836 US-PATENT-APPL-SN-668968 US-PATENT-CLASS-340-174 US-PATENT-3,535,702	c10 N71-13537	NASA-CASE-XNP-08274 US-PATENT-APPL-SN-730703 US-PATENT-CLASS-73-382 US-PATENT-3,520,190
c09 N71-12516	NASA-CASE-XNP-09768 US-PATENT-APPL-SN-698629 US-PATENT-CLASS-307-243 US-PATENT-3,535,554	c10 N71-13545	NASA-CASE-LAR-10774 US-PATENT-APPL-SN-802820 US-PATENT-CLASS-73-1 US-PATENT-3,534,584
		c15 N71-13789	NASA-CASE-XLA-01141

ACCESSION NUMBER INDEX

		US-PATENT-AFPL-SN-353632			US-PATENT-CLASS-350-3.5
		US-PATENT-CLASS-102-49			US-PATENT-3,535,014
		US-PATENT-3,263,610		c31 N71-15566	NASA-CASE-XKS-08012-2
c21 N71-13558		NASA-CASE-GSC-10087-2			US-PATENT-APPL-SN-874958
		US-PATENT-APPL-SN-701744			US-PATENT-CLASS-340-172.5
		US-PATENT-CLASS-343-112			US-PATENT-3,535,683
		US-PATENT-3,495,260		c16 N71-15567	NASA-CASE-ERC-10017
c18 N71-14014		NASA-CASE-GSC-10072			US-PATENT-APPL-SN-677506
		US-PATENT-AFPL-SN-686296			US-PATENT-CLASS-350-3.5
		US-PATENT-CLASS-106-15			US-PATENT-3,535,012
		US-PATENT-3,493,401		c33 N71-15568	NASA-CASE-XLE-09475-1
c33 N71-14032		NASA-CASE-XLE-05913			US-PATENT-APPL-SN-710945
		US-PATENT-AFPL-SN-551933			US-PATENT-CLASS-136-228
		US-PATENT-CLASS-117-106			US-PATENT-3,535,165
		US-PATENT-3,490,939		c15 N71-15571	NASA-CASE-XLA-07911
c33 N71-14035		NASA-CASE-XLE-03307			US-PATENT-APPL-SN-660572
		US-PATENT-AFPL-SN-613979			US-PATENT-CLASS-33-207
		US-PATENT-CLASS-244-1			US-PATENT-3,492,739
		US-PATENT-3,490,718		c21 N71-15582	NASA-CASE-XLA-01163
c28 N71-14043		NASA-CASE-XLE-01124			US-PATENT-APPL-SN-405632
		US-PATENT-APPL-SN-312269			US-PATENT-CLASS-60-35.55
		US-PATENT-CLASS-60-35.5			US-PATENT-3,270,505
		US-PATENT-3,238,715		c21 N71-15583	NASA-CASE-XNF-01598
c28 N71-14044		NASA-CASE-XGS-08729			US-PATENT-APPL-SN-333770
		US-PATENT-APPL-SN-667637			US-PATENT-CLASS-244-1
		US-PATENT-CLASS-60-200			US-PATENT-3,270,985
		US-PATENT-3,490,235		c15 N71-15597	NASA-CASE-XLE-08917
c28 N71-14058		NASA-CASE-MSC-12139-1			US-PATENT-APPL-SN-662829
		US-PATENT-AFPL-SN-797796			US-PATENT-CLASS-113-116
		US-PATENT-CLASS-103-37			US-PATENT-3,490,405
		US-PATENT-3,492,947		c14 N71-15598	NASA-CASE-XAC-00812
c27 N71-14090		NASA-CASE-LAB-10173-1			US-PATENT-APPL-SN-255132
		US-PATENT-APPL-SN-758942			US-PATENT-CLASS-73-341
		US-PATENT-CLASS-149-19			US-PATENT-3,238,777
		US-PATENT-3,492,176		c14 N71-15599	NASA-CASE-XNF-04161
c21 N71-14132		NASA-CASE-XLA-05464			US-PATENT-APPL-SN-568356
		US-PATENT-APPL-SN-656995			US-PATENT-CLASS-250-83.3
		US-PATENT-CLASS-244-1			US-PATENT-3,444,375
		US-PATENT-3,493,194		c14 N71-15600	NASA-CASE-XKS-06250
c21 N71-14159		NASA-CASE-XGS-04393			US-PATENT-APPL-SN-649075
		US-PATENT-APPL-SN-700142			US-PATENT-CLASS-73-97
		US-PATENT-CLASS-244-1			US-PATENT-3,492,862
		US-PATENT-3,490,719		c14 N71-15604	NASA-CASE-XFO-10337
c26 N71-14354		NASA-CASE-ERC-10138			US-PATENT-APPL-SN-714296
		US-PATENT-APPL-SN-821586			US-PATENT-CLASS-350-58
		US-PATENT-CLASS-225-2			US-PATENT-3,488,103
		US-PATENT-3,493,155		c14 N71-15605	NASA-CASE-GSC-10062
c15 N71-14932		NASA-CASE-LEW-11531			US-PATENT-APPL-SN-658955
		US-PATENT-APPL-SN-643332			US-PATENT-CLASS-350-285
		US-PATENT-CLASS-219-72			US-PATENT-3,493,294
		US-PATENT-3,493,711		c15 N71-15606	NASA-CASE-XNF-06031
c14 N71-14996		NASA-CASE-XLA-00936			US-PATENT-APPL-SN-590144
		US-PATENT-APPL-SN-282818			US-PATENT-CLASS-250-52
		US-PATENT-CLASS-73-170			US-PATENT-3,493,746
		US-PATENT-3,238,774		c15 N71-15607	NASA-CASE-XNF-03287
c23 N71-15467		NASA-CASE-XNP-03796			US-PATENT-APPL-SN-658956
		US-PATENT-APPL-SN-453231			US-PATENT-CLASS-228-7
		US-PATENT-CLASS-62-6			US-PATENT-3,443,732
		US-PATENT-3,260,055		c15 N71-15608	NASA-CASE-NPO-10117
c17 N71-15468		NASA-CASE-LEW-10393-1			US-PATENT-APPL-SN-668238
		US-PATENT-APPL-SN-644799			US-PATENT-CLASS-138-42
		US-PATENT-CLASS-75-202			US-PATENT-3,493,012
		US-PATENT-3,535,110		c15 N71-15609	NASA-CASE-XNF-04709
c18 N71-15469		NASA-CASE-ARC-10099-1			US-PATENT-APPL-SN-683507
		US-PATENT-APPL-SN-704224			US-PATENT-CLASS-137-81.5
		US-PATENT-CLASS-106-15			US-PATENT-3,493,003
		US-PATENT-3,535,130		c15 N71-15610	NASA-CASE-XLE-01604-2
c18 N71-15545		NASA-CASE-XKS-09691-1			US-PATENT-APPL-SN-683613
		US-PATENT-APPL-SN-738119			US-PATENT-CLASS-117-50
		US-PATENT-CLASS-8-94.12			US-PATENT-3,493,415
		US-PATENT-3,526,473		c14 N71-15620	NASA-CASE-XLA-01926
c16 N71-15550		NASA-CASE-XNP-05219			US-PATENT-APPL-SN-784521
		US-PATENT-APPL-SN-336103			US-PATENT-CLASS-340-57
		US-PATENT-CLASS-330-4			US-PATENT-3,491,335
		US-PATENT-3,299,364		c14 N71-15621	NASA-CASE-XNF-09572
c16 N71-15551		NASA-CASE-ERC-10019			US-PATENT-APPL-SN-660841
		US-PATENT-APPL-SN-677508			US-PATENT-CLASS-35-10.2
		US-PATENT-CLASS-350-3.5			US-PATENT-3,493,665
		US-PATENT-3,535,013		c14 N71-15622	NASA-CASE-XNF-04111
c25 N71-15562		NASA-CASE-XLA-03374			US-PATENT-APPL-SN-560969
		US-PATENT-APPL-SN-793770			US-PATENT-CLASS-350-213
		US-PATENT-CLASS-315-111			US-PATENT-3,493,291
		US-PATENT-3,535,586		c33 N71-15623	NASA-CASE-XKS-01816
c28 N71-15563		NASA-CASE-XLA-02865			US-PATENT-APPL-SN-425364
		US-PATENT-APPL-SN-016946			US-PATENT-CLASS-60-35.6
		US-PATENT-CLASS-244-53			US-PATENT-3,270,503
		US-PATENT-3,270,990		c33 N71-15625	NASA-CASE-XLE-01399
c16 N71-15565		NASA-CASE-MFS-20074			US-PATENT-APPL-SN-320233
		US-PATENT-APPL-SN-801312			US-PATENT-CLASS-13-26

ACCESSION NUMBER INDEX

c27 N71-15634	US-PATENT-3,263,016 NASA-CASE-XLE-01988 US-PATENT-APPL-SN-308918 US-PATENT-CLASS-60-35.6 US-PATENT-3,258,912	c31 N71-15692	US-PATENT-3,534,826 NASA-CASE-XLA-01339 US-PATENT-APPL-SN-373591 US-PATENT-CLASS-102-49 US-PATENT-3,260,204
c27 N71-15635	NASA-CASE-XLE-01182 US-PATENT-APPL-SN-411949 US-PATENT-CLASS-60-39.46 US-PATENT-3,258,918	c15 N71-15871	NASA-CASE-XMP-02039 US-PATENT-APPL-SN-434143 US-PATENT-CLASS-219-131 US-PATENT-3,271,558
c31 N71-15637	NASA-CASE-XLE-01640 US-PATENT-APPL-SN-473535 US-PATENT-CLASS-60-35.6 US-PATENT-3,270,504	c15 N71-15906	NASA-CASE-XMP-00920 US-PATENT-APPL-SN-329331 US-PATENT-CLASS-62-2 US-PATENT-3,270,512
c33 N71-15641	NASA-CASE-XMP-09802 US-PATENT-APPL-SN-673229 US-PATENT-CLASS-73-190 US-PATENT-3,531,989	c07 N71-15907	NASA-CASE-XMP-01057 US-PATENT-APPL-SN-301683 US-PATENT-CLASS-343-786 US-PATENT-3,305,870
c21 N71-15642	NASA-CASE-XGS-03431 US-PATENT-APPL-SN-588635 US-PATENT-CLASS-250-203 US-PATENT-3,488,504	c08 N71-15908	NASA-CASE-XLA-02705 US-PATENT-APPL-SN-473537 US-PATENT-CLASS-129-16.7 US-PATENT-3,310,054
c31 N71-15643	NASA-CASE-WPO-10311 US-PATENT-APPL-SN-725475 US-PATENT-CLASS-73-116 US-PATENT-3,534,557	c10 N71-15909	NASA-CASE-XAC-03777 US-PATENT-APPL-SN-484489 US-PATENT-CLASS-200-6 US-PATENT-3,283,088
c17 N71-15644	NASA-CASE-XLE-00726 US-PATENT-APPL-SN-355126 US-PATENT-CLASS-75-170 US-PATENT-3,271,140	c10 N71-15910	NASA-CASE-XGS-00823 US-PATENT-APPL-SN-336607 US-PATENT-CLASS-307-88.5 US-PATENT-3,283,175
c31 N71-15647	NASA-CASE-XGS-01143 US-PATENT-APPL-SN-349781 US-PATENT-CLASS-60-35.6 US-PATENT-3,270,501	c15 N71-15918	NASA-CASE-XMS-02383 US-PATENT-APPL-SN-299042 US-PATENT-CLASS-140-123 US-PATENT-3,299,913
c25 N71-15650	NASA-CASE-XLE-00821 US-PATENT-APPL-SN-228707 US-PATENT-CLASS-324-72 US-PATENT-3,300,717	c15 N71-15922	NASA-CASE-XGS-01971 US-PATENT-APPL-SN-353645 US-PATENT-CLASS-85-33 US-PATENT-3,262,351
c28 N71-15658	NASA-CASE-XLE-00409 US-PATENT-APPL-SN-249539 US-PATENT-CLASS-29-157 US-PATENT-3,254,395	c11 N71-15925	NASA-CASE-XIA-00378 US-PATENT-APPL-SN-266107 US-PATENT-CLASS-219-10.49 US-PATENT-3,238,345
c28 N71-15659	NASA-CASE-XLE-05689 US-PATENT-APPL-SN-491845 US-PATENT-CLASS-60-35.6 US-PATENT-3,254,487	c11 N71-15926	NASA-CASE-XIA-00939 US-PATENT-APPL-SN-309354 US-PATENT-CLASS-73-147 US-PATENT-3,276,251
c28 N71-15660	NASA-CASE-XMP-00968 US-PATENT-APPL-SN-339825 US-PATENT-CLASS-60-35.6 US-PATENT-3,270,499	c11 N71-15960	NASA-CASE-XAC-00731 US-PATENT-APPL-SN-232318 US-PATENT-CLASS-220-89 US-PATENT-3,145,874
c28 N71-15661	NASA-CASE-XLE-02066 US-PATENT-APPL-SN-426455 US-PATENT-CLASS-60-35.5 US-PATENT-3,262,262	c14 N71-15962	NASA-CASE-XGS-01587 US-PATENT-APPL-SN-298799 US-PATENT-CLASS-324-43 US-PATENT-3,258,687
c31 N71-15663	NASA-CASE-XLA-00256 US-PATENT-APPL-SN-333766 US-PATENT-CLASS-244-1 US-PATENT-3,262,655	c15 N71-15966	NASA-CASE-XLE-00953 US-PATENT-APPL-SN-336320 US-PATENT-CLASS-22-200 US-PATENT-3,237,253
c31 N71-15664	NASA-CASE-XLA-01332 US-PATENT-APPL-SN-250974 US-PATENT-CLASS-220-15 US-PATENT-3,270,908	c15 N71-15967	NASA-CASE-XLE-00703 US-PATENT-APPL-SN-271822 US-PATENT-CLASS-137-13 US-PATENT-3,270,756
c23 N71-15673	NASA-CASE-XMS-01620 US-PATENT-APPL-SN-357340 US-PATENT-CLASS-248-358 US-PATENT-3,243,154	c15 N71-15968	NASA-CASE-XLE-00586 US-PATENT-APPL-SN-317391 US-PATENT-CLASS-55-160 US-PATENT-3,257,780
c31 N71-15674	NASA-CASE-XLA-03691 US-PATENT-APPL-SN-667625 US-PATENT-CLASS-244-1 US-PATENT-3,534,924	c14 N71-15969	NASA-CASE-XMP-01099 US-PATENT-APPL-SN-73367 US-PATENT-CLASS-73-517 US-PATENT-3,261,210
c31 N71-15675	NASA-CASE-XMP-03169 US-PATENT-APPL-SN-375405 US-PATENT-CLASS-89-1.5 US-PATENT-3,262,365	c32 N71-15974	NASA-CASE-XMS-06782 US-PATENT-APPL-SN-691739 US-PATENT-CLASS-338-5 US-PATENT-3,464,049
c31 N71-15676	NASA-CASE-XGS-05579 US-PATENT-APPL-SN-719869 US-PATENT-CLASS-244-1 US-PATENT-3,534,925	c23 N71-15978	NASA-CASE-XGS-00373 US-PATENT-APPL-SN-105518 US-PATENT-CLASS-161-189 US-PATENT-3,276,946
c31 N71-15687	NASA-CASE-XLA-05369 US-PATENT-APPL-SN-765123 US-PATENT-CLASS-102-49.5 US-PATENT-3,534,686	c15 N71-15986	NASA-CASE-XMP-03498 US-PATENT-APPL-SN-396443 US-PATENT-CLASS-29-155.55 US-PATENT-3,258,831
c18 N71-15688	NASA-CASE-XMP-03459-2 US-PATENT-APPL-SN-681942 US-PATENT-CLASS-260-404.5 US-PATENT-3,535,352	c30 N71-15990	NASA-CASE-XAC-08494 US-PATENT-APPL-SN-690998 US-PATENT-CLASS-356-74 US-PATENT-3,532,428
c31 N71-15689	NASA-CASE-MPS-14685 US-PATENT-APPL-SN-752947 US-PATENT-CLASS-180-118 US-PATENT-CLASS-180-121	c14 N71-15992	NASA-CASE-XGS-01052 US-PATENT-APPL-SN-314572 US-PATENT-CLASS-73-15 US-PATENT-3,242,716

ACCESSION NUMBER INDEX

c14 N71-16014	NASA-CASE-XLE-00820	US-PATENT-APPL-SN-349782
	US-PATENT-APEL-SN-228569	US-PATENT-CLASS-73-147
	US-PATENT-CLASS-324-32	US-PATENT-3,273,388
	US-PATENT-3,283,241	
c17 N71-16025	NASA-CASE-XLE-02991	c02 N71-16087 NASA-CASE-IAC-02058
	US-PATENT-APEL-SN-375401	US-PATENT-APPL-SN-342572
	US-PATENT-CLASS-75-170	US-PATENT-CLASS-244-1
	US-PATENT-3,276,865	US-PATENT-3,276,722
c17 N71-16026	NASA-CASE-XLE-02082	c07 N71-16088 NASA-CASE-IGS-01022
	US-PATENT-APEL-SN-360180	US-PATENT-APPL-SN-341323
	US-PATENT-CLASS-75-171	US-PATENT-CLASS-325-4
	US-PATENT-3,276,866	US-PATENT-3,277,373
c11 N71-16028	NASA-CASE-XLA-01787	c09 N71-16089 NASA-CASE-IAC-02405
	US-PATENT-APEL-SN-304749	US-PATENT-APPL-SN-433821
	US-PATENT-CLASS-35-29	US-PATENT-CLASS-200-6
	US-PATENT-3,270,441	US-PATENT-3,271,532
c10 N71-16030	NASA-CASE-XMP-01096	c30 N71-16090 NASA-CASE-GSC-10083-1
	US-PATENT-APEL-SN-307270	US-PATENT-APPL-SN-641431
	US-PATENT-CLASS-318-376	US-PATENT-CLASS-343-6
	US-PATENT-3,271,649	US-PATENT-3,471,856
c12 N71-16031	NASA-CASE-XMS-01445	c24 N71-16095 NASA-CASE-IAC-06506-1
	US-PATENT-APPL-SN-385526	US-PATENT-APPL-SN-701732
	US-PATENT-CLASS-137-615	US-PATENT-CLASS-250-41.9
	US-PATENT-3,308,848	US-PATENT-3,532,880
c26 N71-16037	NASA-CASE-XGS-05718	c23 N71-16098 NASA-CASE-IAC-03107
	US-PATENT-APPL-SN-584071	US-PATENT-APPL-SN-538168
	US-PATENT-CLASS-29-472.9	US-PATENT-CLASS-73-505
	US-PATENT-3,452,423	US-PATENT-3,455,171
c10 N71-16042	NASA-CASE-XAC-00942	c23 N71-16099 NASA-CASE-IGS-07514
	US-PATENT-APPL-SN-310506	US-PATENT-APPL-SN-640453
	US-PATENT-CLASS-307-88.5	US-PATENT-CLASS-328-1
	US-PATENT-3,277,314	US-PATENT-3,509,469
c17 N71-16044	NASA-CASE-XGS-06306	c23 N71-16100 NASA-CASE-IGS-05715
	US-PATENT-APPL-SN-685473	US-PATENT-APPL-SN-668257
	US-PATENT-CLASS-156-3	US-PATENT-CLASS-250-233
	US-PATENT-3,532,568	US-PATENT-3,532,894
c18 N71-16046	NASA-CASE-GSC-10007	c23 N71-16101 NASA-CASE-XMP-08883
	US-PATENT-APPL-SN-627599	US-PATENT-APPL-SN-617021
	US-PATENT-CLASS-117-201	US-PATENT-CLASS-356-117
	US-PATENT-3,532,538	US-PATENT-3,520,617
c15 N71-16052	NASA-CASE-XLE-02999	c31 N71-16102 NASA-CASE-IGS-09190
	US-PATENT-APPL-SN-431235	US-PATENT-APPL-SN-647298
	US-PATENT-CLASS-29-148.4	US-PATENT-CLASS-343-915
	US-PATENT-3,262,186	US-PATENT-3,521,290
c10 N71-16057	NASA-CASE-XMP-01193	c32 N71-16103 NASA-CASE-LAR-10317-1
	US-PATENT-APPL-SN-366226	US-PATENT-APPL-SN-739927
	US-PATENT-CLASS-324-57	US-PATENT-CLASS-137-582
	US-PATENT-3,277,366	US-PATENT-3,508,578
c10 N71-16058	NASA-CASE-XMP-01097	c33 N71-16104 NASA-CASE-XLE-00785
	US-PATENT-APPL-SN-290873	US-PATENT-APPL-SN-666554
	US-PATENT-CLASS-340-227	US-PATENT-CLASS-60-108
	US-PATENT-3,277,458	US-PATENT-3,508,402
c25 N71-16073	NASA-CASE-XAC-05695	c18 N71-16105 NASA-CASE-XLE-08511-2
	US-PATENT-APPL-SN-634038	US-PATENT-APPL-SN-711921
	US-PATENT-CLASS-324-34	US-PATENT-CLASS-117-119
	US-PATENT-3,517,302	US-PATENT-3,508,955
c15 N71-16075	NASA-CASE-XLA-00284	c32 N71-16106 NASA-CASE-XIA-04605
	US-PATENT-APPL-SN-240760	US-PATENT-APPL-SN-619519
	US-PATENT-CLASS-117-69	US-PATENT-CLASS-137-582
	US-PATENT-3,264,135	US-PATENT-3,443,584
c15 N71-16076	NASA-CASE-XLE-00106	c18 N71-16124 NASA-CASE-XMP-05279
	US-PATENT-APPL-SN-629759	US-PATENT-APPL-SN-617774
	US-PATENT-CLASS-25-156	US-PATENT-CLASS-106-88
	US-PATENT-2,944,316	US-PATENT-3,508,940
c15 N71-16077	NASA-CASE-XLA-00302	c18 N71-16210 NASA-CASE-XMP-08837
	US-PATENT-APPL-SN-284266	US-PATENT-APPL-SN-691736
	US-PATENT-CLASS-117-46	US-PATENT-CLASS-204-20
	US-PATENT-3,271,181	US-PATENT-3,526,580
c15 N71-16078	NASA-CASE-XGS-00824	c23 N71-16212 NASA-CASE-WFO-10250
	US-PATENT-APPL-SN-379072	US-PATENT-APPL-SN-736848
	US-PATENT-CLASS-89-1	US-PATENT-CLASS-149-1
	US-PATENT-3,309,961	US-PATENT-3,516,879
c15 N71-16079	NASA-CASE-XLA-00415	c24 N71-16213 NASA-CASE-IGS-06628
	US-PATENT-APPL-SN-314074	US-PATENT-APPL-SN-665680
	US-PATENT-CLASS-233-11	US-PATENT-CLASS-315-111
	US-PATENT-3,276,679	US-PATENT-3,509,419
c31 N71-16080	NASA-CASE-HSC-12049	c31 N71-16221 NASA-CASE-XIA-05406
	US-PATENT-APPL-SN-693420	US-PATENT-APPL-SN-777766
	US-PATENT-CLASS-52-3	US-PATENT-CLASS-73-432
	US-PATENT-3,465,482	US-PATENT-3,526,159
c31 N71-16081	NASA-CASE-IGS-03351	c31 N71-16222 NASA-CASE-HFS-11133
	US-PATENT-APPL-SN-472747	US-PATENT-APPL-SN-693419
	US-PATENT-CLASS-244-31	US-PATENT-CLASS-244-1
	US-PATENT-3,276,726	US-PATENT-3,508,723
c31 N71-16085	NASA-CASE-XLA-09881	c27 N71-16223 NASA-CASE-HFS-12750
	US-PATENT-APPL-SN-710562	US-PATENT-APPL-SN-806149
	US-PATENT-CLASS-244-138	US-PATENT-CLASS-73-432
	US-PATENT-3,520,503	US-PATENT-3,526,140
c09 N71-16086	NASA-CASE-XLE-02038	c28 N71-16224 NASA-CASE-HFS-11497
		US-PATENT-APPL-SN-740733

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-239-265.43				US-PATENT-3,493,004
	US-PATENT-3,526,365		c14 N71-17584		NASA-CASE-XNP-09462
c33 N71-16277	NASA-CASE-XMS-04268				US-PATENT-APPL-SN-658957
	US-PATENT-APPL-SN-516160				US-PATENT-CLASS-73-57
	US-PATENT-CLASS-165-133				US-PATENT-3,500,677
	US-PATENT-3,502,141		c14 N71-17585		NASA-CASE-XGS-05680
c33 N71-16278	NASA-CASE-XMF-04237				US-PATENT-APPL-SN-656953
	US-PATENT-APPL-SN-539237				US-PATENT-CLASS-318-138
	US-PATENT-CLASS-219-364				US-PATENT-3,501,664
	US-PATENT-3,517,162		c14 N71-17586		NASA-CASE-XIA-08646
c20 N71-16281	NASA-CASE-XLA-02081				US-PATENT-APPL-SN-677476
	US-PATENT-APPL-SN-522795				US-PATENT-CLASS-73-105
	US-PATENT-CLASS-73-189				US-PATENT-3,534,596
	US-PATENT-3,507,150		c14 N71-17587		NASA-CASE-XMF-05844
c20 N71-16340	NASA-CASE-XMF-14032				US-PATENT-APPL-SN-706564
	US-PATENT-APPL-SN-679862				US-PATENT-CLASS-73-382
	US-PATENT-CLASS-250-209				US-PATENT-3,500,688
	US-PATENT-3,501,641		c14 N71-17588		NASA-CASE-MFS-12806
c23 N71-16341	NASA-CASE-XGS-05291				US-PATENT-APPL-SN-686933
	US-PATENT-APPL-SN-553891				US-PATENT-CLASS-55-179
	US-PATENT-CLASS-356-209				US-PATENT-3,490,205
	US-PATENT-3,504,983		c05 N71-17599		NASA-CASE-HSC-12206-1
c31 N71-16345	NASA-CASE-XMF-05344				US-PATENT-APPL-SN-856258
	US-PATENT-APPL-SN-702396				US-PATENT-CLASS-128-142.5
	US-PATENT-CLASS-244-1				US-PATENT-3,516,404
	US-PATENT-3,520,496		c11 N71-17600		NASA-CASE-MFS-14915
c31 N71-16346	NASA-CASE-XMS-03613				US-PATENT-APPL-SN-694340
	US-PATENT-APPL-SN-802816				US-PATENT-CLASS-220-89
	US-PATENT-CLASS-244-1				US-PATENT-3,469,734
	US-PATENT-3,526,372		c32 N71-17609		NASA-CASE-XIA-02332
c27 N71-16348	NASA-CASE-HSC-12280				US-PATENT-APPL-SN-388024
	US-PATENT-APPL-SN-372648				US-PATENT-CLASS-212-11
	US-PATENT-CLASS-250-43.5				US-PATENT-3,276,602
	US-PATENT-3,501,632		c33 N71-17610		NASA-CASE-XLA-00377
c23 N71-16355	NASA-CASE-XGS-05534				US-PATENT-APPL-SN-270118
	US-PATENT-APPL-SN-578925				US-PATENT-CLASS-230-162
	US-PATENT-CLASS-23-253				US-PATENT-3,309,012
	US-PATENT-3,520,660		c14 N71-17626		NASA-CASE-LAR-10274-1
c33 N71-16356	NASA-CASE-NPO-10158				US-PATENT-APPL-SN-717052
	US-PATENT-APPL-SN-730702				US-PATENT-CLASS-188-1
	US-PATENT-CLASS-73-343				US-PATENT-3,491,857
	US-PATENT-3,526,134		c14 N71-17627		NASA-CASE-XGS-03532
c33 N71-16357	NASA-CASE-NPO-10138				US-PATENT-APPL-SN-538913
	US-PATENT-APPL-SN-759457				US-PATENT-CLASS-356-106
	US-PATENT-CLASS-236-1				US-PATENT-3,488,123
	US-PATENT-3,526,359		c15 N71-17628		NASA-CASE-MFS-10340
c23 N71-16365	NASA-CASE-XNP-08840				US-PATENT-APPL-SN-716734
	US-PATENT-APPL-SN-649360				US-PATENT-CLASS-225-1
	US-PATENT-CLASS-356-36				US-PATENT-3,507,425
	US-PATENT-3,526,460		c31 N71-17629		NASA-CASE-XLE-03583
c27 N71-16352	NASA-CASE-XNP-09744				US-PATENT-APPL-SN-400617
	US-PATENT-APPL-SN-685750				US-PATENT-CLASS-244-3.22
	US-PATENT-CLASS-60-39.47				US-PATENT-3,276,376
	US-PATENT-3,507,114		c12 N71-17631		NASA-CASE-NEO-10122
c17 N71-16393	NASA-CASE-NPO-10271				US-PATENT-APPL-SN-710949
	US-PATENT-APPL-SN-763869				US-PATENT-CLASS-60-217
	US-PATENT-CLASS-21-207				US-PATENT-3,534,555
	US-PATENT-3,529,928		c32 N71-17645		NASA-CASE-XNP-01153
c32 N71-16428	NASA-CASE-XLA-03135				US-PATENT-APPL-SN-336608
	US-PATENT-APPL-SN-582171				US-PATENT-CLASS-73-88
	US-PATENT-CLASS-73-71.4				US-PATENT-3,273,381
	US-PATENT-3,503,251		c15 N71-17647		NASA-CASE-XMF-01667
c12 N71-16851	NASA-CASE-XLA-02079				US-PATENT-APPL-SN-577115
	US-PATENT-APPL-SN-435756				US-PATENT-CLASS-118-11
	US-PATENT-CLASS-188-87				US-PATENT-3,502,051
	US-PATENT-3,310,138		c15 N71-17648		NASA-CASE-HSC-12116-1
c12 N71-17569	NASA-CASE-HSC-12084-1				US-PATENT-APPL-SN-768336
	US-PATENT-APPL-SN-762438				US-PATENT-CLASS-251-358
	US-PATENT-CLASS-73-204				US-PATENT-3,508,739
	US-PATENT-3,500,686		c15 N71-17649		NASA-CASE-MFS-11132
c12 N71-17573	NASA-CASE-LAR-10323-1				US-PATENT-APPL-SN-744910
	US-PATENT-APPL-SN-738314				US-PATENT-CLASS-248-360
	US-PATENT-CLASS-73-45.5				US-PATENT-3,528,382
	US-PATENT-3,516,284		c15 N71-17650		NASA-CASE-XNP-05114
c14 N71-17574	NASA-CASE-XGS-04993				US-PATENT-APPL-SN-637882
	US-PATENT-APPL-SN-577775				US-PATENT-CLASS-29-517
	US-PATENT-CLASS-96-49				US-PATENT-3,507,034
	US-PATENT-3,458,313		c15 N71-17651		NASA-CASE-XLE-03803-2
c14 N71-17575	NASA-CASE-XNP-06531				US-PATENT-APPL-SN-669336
	US-PATENT-APPL-SN-732917				US-PATENT-CLASS-156-172
	US-PATENT-CLASS-204-195				US-PATENT-3,535,179
	US-PATENT-3,509,034		c15 N71-17652		NASA-CASE-XLE-05079
c12 N71-17578	NASA-CASE-MFS-10412				US-PATENT-APPL-SN-601228
	US-PATENT-APPL-SN-701635				US-PATENT-CLASS-310-93
	US-PATENT-CLASS-137-81.5				US-PATENT-3,493,797
	US-PATENT-3,520,317		c15 N71-17653		NASA-CASE-ARC-10140-1
c12 N71-17579	NASA-CASE-XLA-07391				US-PATENT-APPL-SN-783379
	US-PATENT-APPL-SN-726898				US-PATENT-CLASS-24-211
	US-PATENT-CLASS-137-81.5				US-PATENT-CLASS-85-3

ACCESSION NUMBER INDEX

c15 N71-17654	US-PATENT-3,534,650 NASA-CASE-XNP-09702 US-PATENT-APEL-SN-730734 US-PATENT-CLASS-239-416 US-PATENT-3,534,909	c31 N71-17730	NASA-CASE-XNP-01543 US-PATENT-APEL-SN-402365 US-PATENT-CLASS-102-49 US-PATENT-3,286,629
c14 N71-17655	NASA-CASE-NPO-10320 US-PATENT-APEL-SN-718689 US-PATENT-CLASS-356-106 US-PATENT-3,535,041	c30 N71-17788	NASA-CASE-IGS-00783 US-PATENT-APEL-SN-372438 US-PATENT-CLASS-73-432 US-PATENT-3,286,531
c14 N71-17656	NASA-CASE-MPS-12827 US-PATENT-APEL-SN-742817 US-PATENT-CLASS-73-88.5 US-PATENT-3,534,592	c23 N71-17802	NASA-CASE-XLE-00454 US-PATENT-APEL-SN-295855 US-PATENT-CLASS-73-295 US-PATENT-3,273,392
c14 N71-17657	NASA-CASE-XNP-09205 US-PATENT-APEL-SN-768473 US-PATENT-CLASS-33-149 US-PATENT-3,534,479	c15 N71-17803	NASA-CASE-XNS-05516 US-PATENT-APEL-SN-563648 US-PATENT-CLASS-264-92 US-PATENT-3,488,414
c14 N71-17658	NASA-CASE-XMP-04966 US-PATENT-APEL-SN-727480 US-PATENT-CLASS-33-174 US-PATENT-3,534,480	c15 N71-17805	NASA-CASE-MPS-12805 US-PATENT-APEL-SN-758082 US-PATENT-CLASS-81-63.1 US-PATENT-CLASS-192-43.1
c14 N71-17659	NASA-CASE-XMP-02964 US-PATENT-APEL-SN-493942 US-PATENT-CLASS-73-15.4 US-PATENT-3,465,569	c26 N71-17818	US-PATENT-3,534,836 NASA-CASE-INT-01016 US-PATENT-APEL-SN-326299 US-PATENT-CLASS-264-27
c12 N71-17661	NASA-CASE-NPO-10298 US-PATENT-APEL-SN-745852 US-PATENT-CLASS-137-341 US-PATENT-3,534,765	c15 N71-17822	US-PATENT-3,274,304 NASA-CASE-ABC-10009-1 US-PATENT-APEL-SN-714595 US-PATENT-CLASS-324-58.5
c14 N71-17662	NASA-CASE-NPO-10300 US-PATENT-APEL-SN-718769 US-PATENT-CLASS-350-285 US-PATENT-3,535,024	c33 N71-17897	US-PATENT-3,532,973 NASA-CASE-XLA-00892 US-PATENT-APEL-SN-245941 US-PATENT-CLASS-62-467
c31 N71-17679	NASA-CASE-XNP-02507 US-PATENT-APEL-SN-475299 US-PATENT-CLASS-244-1 US-PATENT-3,310,256	c26 N71-18064	US-PATENT-3,273,355 NASA-CASE-XNP-01328 US-PATENT-APEL-SN-296879 US-PATENT-CLASS-317-234
c31 N71-17680	NASA-CASE-XLA-00117 US-PATENT-APEL-SN-835153 US-PATENT-CLASS-220-1 US-PATENT-2,996,212	c15 N71-18132	US-PATENT-3,271,637 NASA-CASE-MPS-13686 US-PATENT-APEL-SN-716183 US-PATENT-CLASS-73-67.2
c15 N71-17685	NASA-CASE-NPO-10034 US-PATENT-APEL-SN-668241 US-PATENT-CLASS-339-17 US-PATENT-3,464,051	c14 N71-18465	US-PATENT-3,531,982 NASA-CASE-NPO-10174 US-PATENT-APEL-SN-690163 US-PATENT-CLASS-95-11
c15 N71-17686	NASA-CASE-MPS-20586 US-PATENT-APEL-SN-688868 US-PATENT-CLASS-29-428 US-PATENT-3,526,030	c14 N71-18481	US-PATENT-3,520,238 NASA-CASE-XLA-02758 US-PATENT-APEL-SN-759665 US-PATENT-CLASS-73-4
c15 N71-17687	NASA-CASE-XLA-04143 US-PATENT-APEL-SN-628246 US-PATENT-CLASS-156-510 US-PATENT-3,508,999	c14 N71-18482	US-PATENT-3,531,978 NASA-CASE-XLA-07424 US-PATENT-APEL-SN-635326 US-PATENT-CLASS-313-7
c15 N71-17688	NASA-CASE-XLE-09527 US-PATENT-APEL-SN-686344 US-PATENT-CLASS-29-148.4 US-PATENT-3,500,525	c14 N71-18483	US-PATENT-3,466,484 NASA-CASE-XER-09519 US-PATENT-APEL-SN-676375 US-PATENT-CLASS-55-208
c31 N71-17691	NASA-CASE-XLA-00937 US-PATENT-APEL-SN-393461 US-PATENT-CLASS-244-3.14 US-PATENT-3,310,258	c11 N71-18578	US-PATENT-3,469,375 NASA-CASE-XAC-05904 US-PATENT-APEL-SN-662828 US-PATENT-CLASS-89-8
c15 N71-17692	NASA-CASE-MPS-14772 US-PATENT-APEL-SN-774151 US-PATENT-CLASS-74-63 US-PATENT-3,529,480	c15 N71-18579	US-PATENT-3,465,638 NASA-CASE-IGS-04175 US-PATENT-APEL-SN-606464 US-PATENT-CLASS-72-364
c15 N71-17693	NASA-CASE-NPO-10064 US-PATENT-APEL-SN-668755 US-PATENT-CLASS-244-1 US-PATENT-3,501,112	c15 N71-18580	US-PATENT-3,465,567 NASA-CASE-XNP-09698 US-PATENT-APEL-SN-698592 US-PATENT-CLASS-138-4
c15 N71-17694	NASA-CASE-XNP-08897 US-PATENT-APEL-SN-640450 US-PATENT-CLASS-318-22 US-PATENT-3,501,683		US-PATENT-CLASS-138-45 US-PATENT-CLASS-251-118 US-PATENT-CLASS-251-121 US-PATENT-3,532,128
c15 N71-17696	NASA-CASE-XLA-05100 US-PATENT-APEL-SN-724551 US-PATENT-CLASS-73-103 US-PATENT-3,487,680	c08 N71-18594	US-PATENT-3,533,098 NASA-CASE-XAC-04031 US-PATENT-APEL-SN-538905 US-PATENT-CLASS-340-347
c14 N71-17701	NASA-CASE-NPO-10144 US-PATENT-APEL-SN-688805 US-PATENT-CLASS-73-29 US-PATENT-3,534,585	c08 N71-18595	US-PATENT-3,533,098 NASA-CASE-IGS-03303 US-PATENT-APEL-SN-520838 US-PATENT-CLASS-340-174
c06 N71-17705	NASA-CASE-IGS-05532 US-PATENT-APEL-SN-570093 US-PATENT-CLASS-195-99 US-PATENT-3,423,290	c09 N71-18598	US-PATENT-3,501,752 NASA-CASE-NPO-10066 US-PATENT-APEL-SN-681693 US-PATENT-CLASS-343-13
c31 N71-17729	NASA-CASE-XAC-01591 US-PATENT-APEL-SN-385527 US-PATENT-CLASS-244-1 US-PATENT-3,282,532	c09 N71-18599	US-PATENT-3,447,155 NASA-CASE-LAR-10372 US-PATENT-APEL-SN-730162 US-PATENT-CLASS-102-70.2
		c09 N71-18600	US-PATENT-3,500,747 NASA-CASE-HSC-12164-1

ACCESSION NUMBER INDEX

c08 N71-18602 US-PATENT-APPL-SN-640154
 US-PATENT-CLASS-312-296
 US-PATENT-3,447,850
 NASA-CASE-IGS-04766
 US-PATENT-APPL-SN-598120
 US-PATENT-CLASS-235-175
 US-PATENT-3,532,866
 c12 N71-18603 NASA-CASE-ERC-10031
 US-PATENT-APPL-SN-741461
 US-PATENT-CLASS-40-28
 US-PATENT-3,516,185
 c31 N71-18611 NASA-CASE-MFS-20400
 US-PATENT-APPL-SN-551694
 US-PATENT-CLASS-152-11
 US-PATENT-3,493,027
 c15 N71-18613 NASA-CASE-INP-02588
 US-PATENT-APPL-SN-563644
 US-PATENT-CLASS-219-91
 US-PATENT-3,466,418
 c16 N71-18614 NASA-CASE-IGS-03644
 US-PATENT-APPL-SN-505320
 US-PATENT-CLASS-331-94.5
 US-PATENT-3,517,328
 c12 N71-18615 NASA-CASE-INP-09704
 US-PATENT-APPL-SN-730701
 US-PATENT-CLASS-137-594
 US-PATENT-CLASS-138-46
 US-PATENT-CLASS-251-61.1
 US-PATENT-CLASS-251-127
 US-PATENT-CLASS-251-333
 US-PATENT-CLASS-251-342
 US-PATENT-3,532,118
 c15 N71-18616 NASA-CASE-KLA-07390
 US-PATENT-APPL-SN-665681
 US-PATENT-CLASS-72-53
 US-PATENT-3,531,964
 c14 N71-18625 NASA-CASE-NPO-10175
 US-PATENT-APPL-SN-685787
 US-PATENT-CLASS-137-505.12
 US-PATENT-3,443,583
 c08 N71-18692 NASA-CASE-MFS-14322
 US-PATENT-APPL-SN-646934
 US-PATENT-CLASS-328-134
 US-PATENT-3,501,701
 c08 N71-18693 NASA-CASE-IGS-04765
 US-PATENT-APPL-SN-577545
 US-PATENT-CLASS-235-156
 US-PATENT-3,508,036
 c08 N71-18694 NASA-CASE-NPO-10201
 US-PATENT-APPL-SN-691738
 US-PATENT-CLASS-340-174
 US-PATENT-3,509,551
 c03 N71-18698 NASA-CASE-NPO-10373
 US-PATENT-APPL-SN-718752
 US-PATENT-CLASS-136-89
 US-PATENT-3,507,706
 c14 N71-18699 NASA-CASE-KLA-03273
 US-PATENT-APPL-SN-487352
 US-PATENT-CLASS-250-83.3
 US-PATENT-3,458,702
 c15 N71-18701 NASA-CASE-INP-07587
 US-PATENT-APPL-SN-649359
 US-PATENT-CLASS-317-122
 US-PATENT-3,448,346
 c09 N71-18720 NASA-CASE-MSC-12101
 US-PATENT-APPL-SN-763705
 US-PATENT-CLASS-343-718
 US-PATENT-3,509,570
 c09 N71-18721 NASA-CASE-XER-07894
 US-PATENT-APPL-SN-644444
 US-PATENT-CLASS-331-107
 US-PATENT-3,509,491
 c10 N71-18722 NASA-CASE-ERC-10046
 US-PATENT-APPL-SN-793772
 US-PATENT-CLASS-343-100
 US-PATENT-3,501,764
 c10 N71-18723 NASA-CASE-INP-09450
 US-PATENT-APPL-SN-640459
 US-PATENT-CLASS-307-273
 US-PATENT-3,501,649
 c10 N71-18724 NASA-CASE-KLA-09371
 US-PATENT-APPL-SN-568160
 US-PATENT-CLASS-318-257
 US-PATENT-3,504,258
 c08 N71-18751 NASA-CASE-KLA-07732
 US-PATENT-APPL-SN-641441
 US-PATENT-CLASS-307-216
 US-PATENT-3,512,009
 c08 N71-18752 NASA-CASE-INP-00663

c10 N71-18772 US-PATENT-APPL-SN-205470
 US-PATENT-CLASS-321-5
 US-PATENT-3,521,143
 NASA-CASE-GSC-10366-1
 US-PATENT-APPL-SN-771523
 US-PATENT-CLASS-318-138
 US-PATENT-3,532,948
 c11 N71-18773 NASA-CASE-INP-07488
 US-PATENT-APPL-SN-707495
 US-PATENT-CLASS-35-12
 US-PATENT-3,534,485
 c09 N71-18830 NASA-CASE-XAC-10768
 US-PATENT-APPL-SN-711970
 US-PATENT-CLASS-250-83
 US-PATENT-3,508,053
 c09 N71-18843 NASA-CASE-INP-03263
 US-PATENT-APPL-SN-506908
 US-PATENT-CLASS-340-146.1
 US-PATENT-3,501,743
 c21 N71-19212 NASA-CASE-MFS-20386
 US-PATENT-APPL-SN-818349
 US-PATENT-CLASS-356-28
 US-PATENT-3,532,427
 c15 N71-19213 NASA-CASE-MFS-14259
 US-PATENT-APPL-SN-787410
 US-PATENT-CLASS-138-43
 US-PATENT-3,536,103
 c15 N71-19214 NASA-CASE-MFS-20410
 US-PATENT-APPL-SN-819599
 US-PATENT-CLASS-244-1
 US-PATENT-3,534,926
 c02 N71-19287 NASA-CASE-GSC-10087-1
 US-PATENT-APPL-SN-701679
 US-PATENT-CLASS-343-112
 US-PATENT-3,534,367
 c08 N71-19288 NASA-CASE-NPO-10068
 US-PATENT-APPL-SN-668969
 US-PATENT-CLASS-340-172.5
 US-PATENT-3,501,750
 c10 N71-19417 NASA-CASE-INP-10984-1
 US-PATENT-APPL-SN-605095
 US-PATENT-CLASS-340-213.1
 US-PATENT-3,533,093
 c10 N71-19418 NASA-CASE-GSC-10041-1
 US-PATENT-APPL-SN-684209
 US-PATENT-CLASS-331-113
 US-PATENT-3,458,833
 c08 N71-19420 NASA-CASE-INP-09453
 US-PATENT-APPL-SN-640448
 US-PATENT-CLASS-226-190
 US-PATENT-3,507,436
 c10 N71-19421 NASA-CASE-KLA-08493
 US-PATENT-APPL-SN-749148
 US-PATENT-CLASS-324-72
 US-PATENT-3,532,975
 c14 N71-19431 NASA-CASE-IGS-02439
 US-PATENT-APPL-SN-487341
 US-PATENT-CLASS-324-120
 US-PATENT-3,422,352
 c08 N71-19432 NASA-CASE-IGS-02440
 US-PATENT-APPL-SN-655677
 US-PATENT-CLASS-328-42
 US-PATENT-3,517,318
 c07 N71-19433 NASA-CASE-MFS-13046
 US-PATENT-APPL-SN-673228
 US-PATENT-CLASS-178-6
 US-PATENT-3,532,807
 c08 N71-19435 NASA-CASE-IGS-02612
 US-PATENT-APPL-SN-502743
 US-PATENT-CLASS-340-347
 US-PATENT-3,509,558
 c07 N71-19436 NASA-CASE-INP-09422
 US-PATENT-APPL-SN-783378
 US-PATENT-CLASS-174-35
 US-PATENT-3,517,109
 c08 N71-19437 NASA-CASE-IGS-04768
 US-PATENT-APPL-SN-598119
 US-PATENT-CLASS-235-158
 US-PATENT-3,508,039
 c03 N71-19438 NASA-CASE-IGS-05432
 US-PATENT-APPL-SN-549860
 US-PATENT-CLASS-320-23
 US-PATENT-3,426,263
 c05 N71-19439 NASA-CASE-MFS-09571
 US-PATENT-APPL-SN-678700
 US-PATENT-CLASS-165-46
 US-PATENT-3,425,487
 c05 N71-19440 NASA-CASE-INP-01177
 US-PATENT-APPL-SN-516150

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-250-83		US-PATENT-3,466,052
	US-PATENT-3,427,454	c09 N71-19610	NASA-CASE-NEO-10037
c09 N71-19449	NASA-CASE-XFR-03107		US-PATENT-AFEL-SN-700987
	US-PATENT-APPL-SN-507257		US-PATENT-CLASS-200-152
	US-PATENT-CLASS-178-6		US-PATENT-3,470,342
	US-PATENT-3,458,651	c08 N71-19687	NASA-CASE-XNP-04780
c09 N71-19466	NASA-CASE-XGS-02812		US-PATENT-AFEL-SN-455477
	US-PATENT-AFEL-SN-502750		US-PATENT-CLASS-340-347
	US-PATENT-CLASS-330-30		US-PATENT-3,430,227
	US-PATENT-3,466,560	c08 N71-19763	NASA-CASE-XAC-06302
c10 N71-19467	NASA-CASE-XMP-08665		US-PATENT-APPL-SN-574284
	US-PATENT-APPL-SN-582609		US-PATENT-CLASS-325-60
	US-PATENT-CLASS-325-63		US-PATENT-3,456,193
	US-PATENT-3,470,475	c07 N71-19773	NASA-CASE-GSC-10373-1
c10 N71-19468	NASA-CASE-IMS-05605-1		US-PATENT-APPL-SN-712658
	US-PATENT-AFEL-SN-764812		US-PATENT-CLASS-325-4
	US-PATENT-CLASS-178-69.5		US-PATENT-3,532,985
	US-PATENT-3,532,819	c07 N71-19854	NASA-CASE-GSC-10553-1
c10 N71-19469	NASA-CASE-XNP-00777		US-PATENT-AFEL-SN-820963
	US-PATENT-APPL-SN-486573		US-PATENT-CLASS-343-100
	US-PATENT-CLASS-329-122		US-PATENT-3,514,365
	US-PATENT-3,517,268	c03 N71-20273	NASA-CASE-NFO-10188
c09 N71-19470	NASA-CASE-XGS-05289		US-PATENT-APPL-SN-681687
	US-PATENT-AFEL-SN-632104		US-PATENT-CLASS-244-1
	US-PATENT-CLASS-331-113		US-PATENT-3,473,758
	US-PATENT-3,470,496	c28 N71-20330	NASA-CASE-XLE-103477-1
c10 N71-19471	NASA-CASE-XLE-03804		US-PATENT-AFEL-SN-466390
	US-PATENT-APPL-SN-526631		US-PATENT-CLASS-60-39.36
	US-PATENT-CLASS-307-235		US-PATENT-3,433,015
	US-PATENT-3,463,939	c15 N71-20393	NASA-CASE-MFS-06074
c10 N71-19472	NASA-CASE-XAC-04030		US-PATENT-APPL-SN-688743
	US-PATENT-APPL-SN-520839		US-PATENT-CLASS-228-9
	US-PATENT-CLASS-328-1		US-PATENT-3,458,104
	US-PATENT-3,464,016	c15 N71-20395	NASA-CASE-XMF-06065
c09 N71-19479	NASA-CASE-XMS-04300		US-PATENT-AFEL-SN-665679
	US-PATENT-AFEL-SN-516158		US-PATENT-CLASS-219-275
	US-PATENT-CLASS-350-275		US-PATENT-3,466,424
	US-PATENT-3,427,093	c31 N71-20396	NASA-CASE-XMF-08523
c09 N71-19480	NASA-CASE-XPR-05637		US-PATENT-APPL-SN-645563
	US-PATENT-AFEL-SN-484855		US-PATENT-CLASS-244-1
	US-PATENT-CLASS-235-194		US-PATENT-3,465,986
	US-PATENT-3,423,579	c16 N71-20400	NASA-CASE-MFS-11279
c15 N71-19485	NASA-CASE-MSC-11010		US-PATENT-APPL-SN-628094
	US-PATENT-APPL-SN-605090		US-PATENT-CLASS-219-121
	US-PATENT-CLASS-251-31		US-PATENT-3,472,998
	US-PATENT-3,447,774	c03 N71-20407	NASA-CASE-NFC-10194
c15 N71-19486	NASA-CASE-XMF-08522		US-PATENT-APPL-SN-668249
	US-PATENT-AFEL-SN-640447		US-PATENT-CLASS-136-182
	US-PATENT-CLASS-219-121		US-PATENT-3,460,995
	US-PATENT-3,474,220	c14 N71-20427	NASA-CASE-IMS-13052
c15 N71-19489	NASA-CASE-XMF-04680		US-PATENT-APPL-SN-561223
	US-PATENT-APPL-SN-634040		US-PATENT-CLASS-62-268
	US-PATENT-CLASS-33-147		US-PATENT-3,455,121
	US-PATENT-3,425,131	c14 N71-20428	NASA-CASE-XGS-04879
c07 N71-19493	NASA-CASE-XKS-08485		US-PATENT-APPL-SN-541395
	US-PATENT-AFEL-SN-649078		US-PATENT-CLASS-324-.5
	US-PATENT-CLASS-343-873		US-PATENT-3,443,208
	US-PATENT-3,509,578	c14 N71-20429	NASA-CASE-XLE-05260
c11 N71-19494	NASA-CASE-MFS-10555		US-PATENT-AFEL-SN-674355
	US-PATENT-APPL-SN-700984		US-PATENT-CLASS-73-117.4
	US-PATENT-CLASS-35-12		US-PATENT-3,463,001
	US-PATENT-3,516,179	c14 N71-20430	NASA-CASE-XLA-03645
c09 N71-19516	NASA-CASE-XNP-06937		US-PATENT-APPL-SN-600266
	US-PATENT-APPL-SN-640449		US-PATENT-CLASS-250-83
	US-PATENT-CLASS-330-30		US-PATENT-3,450,878
	US-PATENT-3,501,712	c14 N71-20435	NASA-CASE-IMS-06767-1
c08 N71-19544	NASA-CASE-XGS-01230		US-PATENT-APPL-SN-716795
	US-PATENT-AFEL-SN-356488		US-PATENT-CLASS-73-422
	US-PATENT-CLASS-340-347		US-PATENT-3,438,263
	US-PATENT-3,474,441	c12 N71-20436	NASA-CASE-LAE-11138
c03 N71-19545	NASA-CASE-NPO-10821		US-PATENT-APPL-SN-694317
	US-PATENT-AFEL-SN-670814		US-PATENT-CLASS-73-147
	US-PATENT-CLASS-136-89		US-PATENT-3,461,721
	US-PATENT-3,466,198	c14 N71-20439	NASA-CASE-XAC-04886-1
c10 N71-19547	NASA-CASE-XGS-03058		US-PATENT-AFEL-SN-574290
	US-PATENT-AFEL-SN-568987		US-PATENT-CLASS-73-142
	US-PATENT-CLASS-307-289		US-PATENT-3,425,272
	US-PATENT-3,517,221	c15 N71-20440	NASA-CASE-XMF-09770
c14 N71-19568	NASA-CASE-MSC-10966		US-PATENT-APPL-SN-700120
	US-PATENT-AFEL-SN-665676		US-PATENT-CLASS-209-10
	US-PATENT-CLASS-250-203		US-PATENT-3,472,372
	US-PATENT-3,421,004	c15 N71-20441	NASA-CASE-IMS-06329-1
c15 N71-19569	NASA-CASE-XLA-05749		US-PATENT-APPL-SN-688742
	US-PATENT-AFEL-SN-621714		US-PATENT-CLASS-73-141
	US-PATENT-CLASS-137-582		US-PATENT-3,472,069
	US-PATENT-3,426,791	c14 N71-20442	NASA-CASE-MFS-11537
c15 N71-19570	NASA-CASE-XLE-05130-2		US-PATENT-APPL-SN-636878
	US-PATENT-AFEL-SN-700586		US-PATENT-CLASS-23-254
	US-PATENT-CLASS-277-25		US-PATENT-3,472,629

ACCESSION NUMBER INDEX

c15 N71-20443	NASA-CASE-MFS-07369 US-PATENT-APPL-SN-640462 US-PATENT-CLASS-29-492 US-PATENT-3,473,216	US-PATENT-APPL-SN-469012 US-PATENT-CLASS-313-271 US-PATENT-3,356,885	
c09 N71-20445	NASA-CASE-INP-09775 US-PATENT-APPL-SN-668247 US-PATENT-CLASS-333-96 US-PATENT-3,474,357	c10 N71-20782	NASA-CASE-IGS-01784 US-PATENT-APPL-SN-396444 US-PATENT-CLASS-250-206 US-PATENT-3,348,053
c09 N71-20446	NASA-CASE-XLE-04250 US-PATENT-APPL-SN-621098 US-PATENT-CLASS-310-54 US-PATENT-3,447,003	c07 N71-20791	NASA-CASE-INP-05254 US-PATENT-APPL-SN-472372 US-PATENT-CLASS-325-31 US-PATENT-3,350,643
c09 N71-20447	NASA-CASE-XLA-02850 US-PATENT-APPL-SN-556784 US-PATENT-CLASS-307-267 US-PATENT-3,473,050	c15 N71-20813	NASA-CASE-IGS-02184 US-PATENT-APPL-SN-608247 US-PATENT-CLASS-248-27 US-PATENT-3,361,400
c10 N71-20448	NASA-CASE-INP-03744 US-PATENT-APPL-SN-547677 US-PATENT-CLASS-318-314 US-PATENT-3,424,966	c07 N71-20814	NASA-CASE-INP-01306 US-PATENT-APPL-SN-343426 US-PATENT-CLASS-179-15 US-PATENT-3,364,311
c14 N71-20461	NASA-CASE-INP-09763 US-PATENT-APPL-SN-600682 US-PATENT-CLASS-117-6 US-PATENT-3,433,662	c12 N71-20815	NASA-CASE-INP-01779 US-PATENT-APPL-SN-521999 US-PATENT-CLASS-346-1 US-PATENT-3,357,024
c03 N71-20491	NASA-CASE-IGS-05434 US-PATENT-APPL-SN-667636 US-PATENT-CLASS-136-182 US-PATENT-3,463,673	c09 N71-20816	NASA-CASE-IAC-01617 US-PATENT-APPL-SN-596338 US-PATENT-CLASS-73-147 US-PATENT-3,360,988
c03 N71-20492	NASA-CASE-XLE-04787 US-PATENT-APPL-SN-551846 US-PATENT-CLASS-136-89 US-PATENT-3,434,885	c33 N71-20834	NASA-CASE-IGS-02009 US-PATENT-APPL-SN-455352 US-PATENT-CLASS-141-5 US-PATENT-3,349,814
c24 N71-20518	NASA-CASE-INP-02592 US-PATENT-APPL-SN-484490 US-PATENT-CLASS-324-33 US-PATENT-3,430,131	c10 N71-20841	NASA-CASE-IGS-01222 US-PATENT-APPL-SN-354162 US-PATENT-CLASS-325-305 US-PATENT-3,348,152
c25 N71-20563	NASA-CASE-XLA-06232 US-PATENT-APPL-SN-612740 US-PATENT-CLASS-324-58.5 US-PATENT-3,473,116	c09 N71-20842	NASA-CASE-INP-05381 US-PATENT-APPL-SN-568352 US-PATENT-CLASS-338-82 US-PATENT-3,350,671
c09 N71-20565	NASA-CASE-IGS-08589-1 US-PATENT-APPL-SN-544899 US-PATENT-CLASS-324-57 US-PATENT-3,434,050	c09 N71-20851	NASA-CASE-INP-04732 US-PATENT-APPL-SN-557584 US-PATENT-CLASS-339-177 US-PATENT-3,358,264
c02 N71-20570	NASA-CASE-IAC-08972 US-PATENT-APPL-SN-700174 US-PATENT-CLASS-244-76 US-PATENT-3,472,470	c10 N71-20852	NASA-CASE-IGS-03502 US-PATENT-APPL-SN-584066 US-PATENT-CLASS-331-17 US-PATENT-3,361,985
c08 N71-20571	NASA-CASE-IGS-04987 US-PATENT-APPL-SN-619908 US-PATENT-CLASS-315-24 US-PATENT-3,437,874	c09 N71-20864	NASA-CASE-IGS-03501 US-PATENT-APPL-SN-576521 US-PATENT-CLASS-343-16 US-PATENT-3,359,555
c09 N71-20658	NASA-CASE-IGS-03454 US-PATENT-APPL-SN-425363 US-PATENT-CLASS-343-915 US-PATENT-3,360,798	c03 N71-20895	NASA-CASE-INP-00826 US-PATENT-APPL-SN-327163 US-PATENT-CLASS-136-89 US-PATENT-3,346,419
c09 N71-20705	NASA-CASE-INP-01599 US-PATENT-APPL-SN-381940 US-PATENT-CLASS-117-212 US-PATENT-3,359,132	c12 N71-20896	NASA-CASE-INP-02251 US-PATENT-APPL-SN-432030 US-PATENT-CLASS-321-48 US-PATENT-3,337,790
c06 N71-20717	NASA-CASE-INP-04133 US-PATENT-APPL-SN-554949 US-PATENT-CLASS-260-2 US-PATENT-3,354,098	c03 N71-20904	NASA-CASE-XLE-01645 US-PATENT-APPL-SN-342574 US-PATENT-CLASS-136-86 US-PATENT-3,357,862
c05 N71-20718	NASA-CASE-IGS-04625 US-PATENT-APPL-SN-519161 US-PATENT-CLASS-244-122 US-PATENT-3,356,320	c06 N71-20905	NASA-CASE-INP-02584 US-PATENT-APPL-SN-506135 US-PATENT-CLASS-260-2 US-PATENT-3,346,515
c15 N71-20739	NASA-CASE-IGS-02011 US-PATENT-APPL-SN-502693 US-PATENT-CLASS-308-9 US-PATENT-3,359,046	c17 N71-20941	NASA-CASE-IGS-00370 US-PATENT-APPL-SN-71366 US-PATENT-CLASS-106-55 US-PATENT-3,350,214
c15 N71-20740	NASA-CASE-XLA-01808 US-PATENT-APPL-SN-517159 US-PATENT-CLASS-74-471 US-PATENT-3,364,777	c28 N71-20942	NASA-CASE-INP-04389 US-PATENT-APPL-SN-523511 US-PATENT-CLASS-60-265 US-PATENT-3,353,359
c14 N71-20741	NASA-CASE-IGS-01618 US-PATENT-APPL-SN-418362 US-PATENT-CLASS-73-29 US-PATENT-3,360,980	c14 N71-21006	NASA-CASE-XLA-01832 US-PATENT-APPL-SN-517858 US-PATENT-CLASS-346-50 US-PATENT-3,354,462
c18 N71-20742	NASA-CASE-IGS-02952 US-PATENT-APPL-SN-519160 US-PATENT-CLASS-55-158 US-PATENT-3,355,861	c14 N71-21007	NASA-CASE-IGS-06236 US-PATENT-APPL-SN-482670 US-PATENT-CLASS-73-290 US-PATENT-3,355,948
c17 N71-20743	NASA-CASE-INP-02786 US-PATENT-APPL-SN-466873 US-PATENT-CLASS-75-142 US-PATENT-3,347,665	c14 N71-21040	NASA-CASE-IGS-03478 US-PATENT-APPL-SN-422100 US-PATENT-CLASS-250-207 US-PATENT-3,358,145
c25 N71-20747	NASA-CASE-XLE-02578	c08 N71-21042	NASA-CASE-IGS-01021 US-PATENT-APPL-SN-279646

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-340-174.1				US-PATENT-3,330,052
	US-PATENT-3,327,298	c11	N71-21475	.....	NASA-CASE-XIA-05378
c32	N71-21045				US-PATENT-APPL-SN-484156
	NASA-CASE-XIA-01731				US-PATENT-CLASS-73-343
	US-PATENT-APPL-SN-425365				US-PATENT-3,331,246
	US-PATENT-CLASS-52-2	c07	N71-21476	.....	NASA-CASE-XNP-00746
	US-PATENT-3,364,631				US-PATENT-APPL-SN-271824
c15	N71-21060				US-PATENT-CLASS-235-181
	NASA-CASE-XIA-03660				US-PATENT-3,359,409
	US-PATENT-APPL-SN-482307	c11	N71-21481	.....	NASA-CASE-XIA-01326
	US-PATENT-CLASS-95-53				US-PATENT-APPL-SN-422097
	US-PATENT-3,361,045				US-PATENT-CLASS-73-147
c31	N71-21064				US-PATENT-3,345,866
	NASA-CASE-XGS-02554	c10	N71-21483	.....	NASA-CASE-XGS-01155
	US-PATENT-APPL-SN-504266				US-PATENT-APPL-SN-557871
	US-PATENT-CLASS-244-1				US-PATENT-CLASS-343-16
	US-PATENT-3,350,034				US-PATENT-3,344,425
c18	N71-21068				NASA-CASE-XNP-06914
	NASA-CASE-XNP-02888				US-PATENT-APPL-SN-590147
	US-PATENT-APPL-SN-409126				US-PATENT-CLASS-85-33
	US-PATENT-CLASS-239-265.11	c28	N71-21493	.....	US-PATENT-3,352,192
	US-PATENT-3,347,465				NASA-CASE-XIA-10450
c14	N71-21072				US-PATENT-APPL-SN-594587
	NASA-CASE-XAC-02981				US-PATENT-CLASS-239-265.19
	US-PATENT-APPL-SN-464879				US-PATENT-3,347,466
	US-PATENT-CLASS-73-398	c33	N71-21507	.....	NASA-CASE-XIE-04603
	US-PATENT-3,352,157				US-PATENT-APPL-SN-638194
c15	N71-21076				US-PATENT-CLASS-60-243
	NASA-CASE-XMS-03745				US-PATENT-3,347,046
	US-PATENT-APPL-SN-534295	c15	N71-21528	.....	NASA-CASE-XIA-01446
	US-PATENT-CLASS-24-263				US-PATENT-APPL-SN-400613
	US-PATENT-3,346,929				US-PATENT-CLASS-53-102
c15	N71-21078				US-PATENT-3,336,725
	NASA-CASE-XNP-03459	c15	N71-21529	.....	NASA-CASE-XGS-02422
	US-PATENT-APPL-SN-457879				US-PATENT-APPL-SN-493943
	US-PATENT-CLASS-29-495				US-PATENT-CLASS-74-126
	US-PATENT-3,357,093				US-PATENT-3,331,255
c14	N71-21075				NASA-CASE-XMS-03722
	NASA-CASE-XIA-03102	c15	N71-21530	.....	US-PATENT-APPL-SN-487934
	US-PATENT-APPL-SN-576195				US-PATENT-CLASS-267-64
	US-PATENT-CLASS-33-31				US-PATENT-3,330,549
	US-PATENT-3,364,578	c15	N71-21531	.....	NASA-CASE-XNP-02341
c14	N71-21082				US-PATENT-APPL-SN-432025
	NASA-CASE-XGS-02629				US-PATENT-CLASS-52-127
	US-PATENT-APPL-SN-500435				US-PATENT-3,330,082
	US-PATENT-CLASS-244-1	c15	N71-21536	.....	NASA-CASE-XMS-06876
	US-PATENT-3,350,033				US-PATENT-APPL-SN-605100
c14	N71-21088				US-PATENT-CLASS-72-34
	NASA-CASE-XNP-06957				US-PATENT-3,345,840
	US-PATENT-APPL-SN-406097	c09	N71-21583	.....	NASA-CASE-XIE-02008
	US-PATENT-CLASS-250-83.3				US-PATENT-APPL-SN-487342
	US-PATENT-3,348,048				US-PATENT-CLASS-338-64
c12	N71-21089				US-PATENT-3,329,918
	NASA-CASE-XMS-01905	c33	N71-21586	.....	NASA-CASE-XIA-01794
	US-PATENT-APPL-SN-280580				US-PATENT-APPL-SN-464880
	US-PATENT-CLASS-141-91				US-PATENT-CLASS-73-86
	US-PATENT-3,331,404				US-PATENT-3,357,237
c14	N71-21090				NASA-CASE-XNP-01402
	NASA-CASE-XIE-00787				US-PATENT-APPL-SN-328140
	US-PATENT-APPL-SN-330210				US-PATENT-CLASS-161-68
	US-PATENT-CLASS-324-33				US-PATENT-3,346,442
	US-PATENT-3,346,806	c21	N71-21688	.....	NASA-CASE-XNP-00684
c14	N71-21091				US-PATENT-APPL-SN-260087
	NASA-CASE-XNP-02983				US-PATENT-CLASS-235-150.25
	US-PATENT-APPL-SN-407599				US-PATENT-3,331,951
	US-PATENT-CLASS-73-88.5	c25	N71-21693	.....	NASA-CASE-XIA-03103
	US-PATENT-3,350,926				US-PATENT-APPL-SN-531642
c15	N71-21177				US-PATENT-CLASS-315-111
	NASA-CASE-XAC-06956				US-PATENT-3,333,152
	US-PATENT-APPL-SN-538166	c25	N71-21694	.....	NASA-CASE-XIE-02902
	US-PATENT-CLASS-259-71				US-PATENT-APPL-SN-485957
	US-PATENT-3,347,531				US-PATENT-CLASS-60-202
c15	N71-21179				US-PATENT-3,336,748
	NASA-CASE-XIA-01401	c21	N71-21708	.....	NASA-CASE-XIA-02551
	US-PATENT-APPL-SN-382976				US-PATENT-APPL-SN-416940
	US-PATENT-CLASS-235-61.6				US-PATENT-CLASS-244-1
	US-PATENT-3,346,724				US-PATENT-3,329,375
c15	N71-21234				NASA-CASE-XGS-04227
	NASA-CASE-XKS-02582	c15	N71-21744	.....	US-PATENT-APPL-SN-545805
	US-PATENT-APPL-SN-424153				US-PATENT-CLASS-74-409
	US-PATENT-CLASS-251-172				US-PATENT-3,359,819
	US-PATENT-3,327,991	c27	N71-21819	.....	NASA-CASE-XIE-03494
c15	N71-21311				US-PATENT-APPL-SN-529593
	NASA-CASE-XNP-03637				US-PATENT-CLASS-60-251
	US-PATENT-APPL-SN-453232				US-PATENT-3,345,822
	US-PATENT-CLASS-310-9.1	c23	N71-21821	.....	NASA-CASE-XNP-01059
	US-PATENT-3,359,435				US-PATENT-APPL-SN-393464
c15	N71-21403				US-PATENT-CLASS-250-232
	NASA-CASE-XNP-03988				US-PATENT-3,354,320
	US-PATENT-APPL-SN-578923				
	US-PATENT-CLASS-252-26				
	US-PATENT-3,361,666				
c15	N71-21404				
	NASA-CASE-XIA-01262				
	US-PATENT-APPL-SN-386800				
	US-PATENT-CLASS-156-3				
	US-PATENT-3,356,549				
c09	N71-21449				
	NASA-CASE-XMS-01991				
	US-PATENT-APPL-SN-410326				
	US-PATENT-CLASS-323-22				
	US-PATENT-3,344,340				
c10	N71-21473				
	NASA-CASE-XGS-08679				
	US-PATENT-APPL-SN-312443				
	US-PATENT-CLASS-343-113				
	US-PATENT-3,340,532				
c11	N71-21474				
	NASA-CASE-XMS-04798				
	US-PATENT-APPL-SN-480210				
	US-PATENT-CLASS-35-12				

ACCESSION NUMBER INDEX

c28 N71-21822	NASA-CASE-XNP-04124	US-PATENT-APPL-SN-254847
	US-PATENT-APPL-SN-498168	US-PATENT-CLASS-102-49.5
	US-PATENT-CLASS-60-202	US-PATENT-3,368,486
	US-PATENT-3,345,820	NASA-CASE-XAC-05333
c26 N71-21824	NASA-CASE-XNP-05429	US-PATENT-APPL-SN-546148
	US-PATENT-APPL-SN-578928	US-PATENT-CLASS-119-15
	US-PATENT-CLASS-103-1	US-PATENT-3,367,308
	US-PATENT-3,361,067	NASA-CASE-XNP-10040
c31 N71-21881	NASA-CASE-XNP-02595	US-PATENT-APPL-SN-592680
	US-PATENT-APPL-SN-502709	US-PATENT-CLASS-188-1
	US-PATENT-CLASS-244-1	US-PATENT-3,381,778
	US-PATENT-3,333,788	NASA-CASE-XMS-04545
c23 N71-21882	NASA-CASE-XNP-03853	US-PATENT-APPL-SN-508601
	US-PATENT-APPL-SN-578931	US-PATENT-CLASS-73-144
	US-PATENT-CLASS-88-24	US-PATENT-3,381,527
	US-PATENT-3,359,855	NASA-CASE-XLA-00793
c15 N71-22705	NASA-CASE-XGS-02884	US-PATENT-APPL-SN-369334
	US-PATENT-APPL-SN-432433	US-PATENT-CLASS-88-1
	US-PATENT-CLASS-51-57	US-PATENT-3,381,569
	US-PATENT-3,341,977	NASA-CASE-XIE-04222
c15 N71-22706	NASA-CASE-XMS-09310	US-PATENT-APPL-SN-512559
	US-PATENT-APPL-SN-655724	US-PATENT-CLASS-220-9
	US-PATENT-CLASS-137-496	US-PATENT-3,379,330
	US-PATENT-3,384,111	NASA-CASE-XLA-03114
c08 N71-22707	NASA-CASE-XNP-04067	US-PATENT-APPL-SN-440039
	US-PATENT-APPL-SN-466875	US-PATENT-CLASS-343-708
	US-PATENT-CLASS-340-172.5	US-PATENT-3,373,430
	US-PATENT-3,369,222	NASA-CASE-XLA-07728
c08 N71-22710	NASA-CASE-XNP-02778	US-PATENT-APPL-SN-538908
	US-PATENT-APPL-SN-508170	US-PATENT-CLASS-165-96
	US-PATENT-CLASS-340-172.5	US-PATENT-3,374,830
	US-PATENT-3,369,223	NASA-CASE-XIE-03925
c15 N71-22713	NASA-CASE-XLA-03492	US-PATENT-APPL-SN-514407
	US-PATENT-APPL-SN-395348	US-PATENT-CLASS-75-204
	US-PATENT-CLASS-156-60	US-PATENT-3,347,337
	US-PATENT-3,342,653	NASA-CASE-XMS-04269
c15 N71-22721	NASA-CASE-XNP-03212	US-PATENT-APPL-SN-516793
	US-PATENT-APPL-SN-577549	US-PATENT-CLASS-250-199
	US-PATENT-CLASS-55-418	US-PATENT-3,341,708
	US-PATENT-3,385,036	NASA-CASE-XMS-02399
c15 N71-22722	NASA-CASE-XMS-04292	US-PATENT-APPL-SN-492344
	US-PATENT-APPL-SN-517157	US-PATENT-CLASS-128-2.06
	US-PATENT-CLASS-82-14	US-PATENT-3,384,075
	US-PATENT-3,373,640	NASA-CASE-XNP-01753
c15 N71-22723	NASA-CASE-XNP-01083	US-PATENT-APPL-SN-423412
	US-PATENT-APPL-SN-432028	US-PATENT-CLASS-235-92
	US-PATENT-CLASS-72-83	US-PATENT-3,374,339
	US-PATENT-3,340,713	NASA-CASE-XMS-02159
c05 N71-22748	NASA-CASE-XMS-04170	US-PATENT-APPL-SN-534564
	US-PATENT-APPL-SN-482311	US-PATENT-CLASS-323-56
	US-PATENT-CLASS-9-312	US-PATENT-3,365,657
	US-PATENT-3,343,189	NASA-CASE-XGS-05441
c08 N71-22749	NASA-CASE-XNP-02748	US-PATENT-APPL-SN-505321
	US-PATENT-APPL-SN-420245	US-PATENT-CLASS-328-233
	US-PATENT-CLASS-340-146.1	US-PATENT-3,366,886
	US-PATENT-3,373,404	NASA-CASE-XLE-02024
c07 N71-22750	NASA-CASE-XNP-01735	US-PATENT-APPL-SN-422099
	US-PATENT-APPL-SN-408438	US-PATENT-CLASS-73-15
	US-PATENT-CLASS-343-786	US-PATENT-3,365,930
	US-PATENT-3,373,431	NASA-CASE-XGS-02319
c14 N71-22752	NASA-CASE-XNP-01974	US-PATENT-APPL-SN-496205
	US-PATENT-APPL-SN-568354	US-PATENT-CLASS-73-117
	US-PATENT-CLASS-73-419	US-PATENT-3,365,941
	US-PATENT-3,383,922	NASA-CASE-XLA-02050
c14 N71-22765	NASA-CASE-XLA-00934	US-PATENT-APPL-SN-568067
	US-PATENT-APPL-SN-326298	US-PATENT-CLASS-244-1
	US-PATENT-CLASS-73-84	US-PATENT-3,386,685
	US-PATENT-3,339,404	NASA-CASE-XLA-03132
c33 N71-22792	NASA-CASE-XLA-01243	US-PATENT-APPL-SN-610728
	US-PATENT-APPL-SN-538911	US-PATENT-CLASS-244-1
	US-PATENT-CLASS-244-1	US-PATENT-3,386,686
	US-PATENT-3,384,324	NASA-CASE-XGS-02630
c09 N71-22756	NASA-CASE-XKS-03381	US-PATENT-APPL-SN-494287
	US-PATENT-APPL-SN-437611	US-PATENT-CLASS-136-132
	US-PATENT-CLASS-317-9	US-PATENT-3,382,107
	US-PATENT-3,340,430	NASA-CASE-XNP-07659
c15 N71-22797	NASA-CASE-XLE-01092	US-PATENT-APPL-SN-567806
	US-PATENT-APPL-SN-422098	US-PATENT-CLASS-18-26
	US-PATENT-CLASS-72-253	US-PATENT-3,381,339
	US-PATENT-3,342,055	NASA-CASE-XLA-02809
c15 N71-22798	NASA-CASE-XMS-04178	US-PATENT-APPL-SN-554897
	US-PATENT-APPL-SN-511299	US-PATENT-CLASS-308-176
	US-PATENT-CLASS-83-467	US-PATENT-3,397,932
	US-PATENT-3,367,224	NASA-CASE-XNP-06926
c15 N71-22799	NASA-CASE-XNP-03511	US-PATENT-APPL-SN-537615
	US-PATENT-APPL-SN-540414	US-PATENT-CLASS-60-258
	US-PATENT-CLASS-90-12	US-PATENT-3,336,754
	US-PATENT-3,386,337	NASA-CASE-XMS-04312
c15 N71-22874	NASA-CASE-XLA-00188	US-PATENT-APPL-SN-521754
c11 N71-22875		
c15 N71-22877		
c15 N71-22878		
c21 N71-22880		
c23 N71-22881		
c09 N71-22888		
c33 N71-22890		
c18 N71-22894		
c16 N71-22895		
c05 N71-22896		
c08 N71-22897		
c10 N71-22961		
c10 N71-22962		
c14 N71-22964		
c14 N71-22965		
c31 N71-22968		
c31 N71-22969		
c03 N71-22974		
c06 N71-22975		
c15 N71-22982		
c28 N71-22983		
c07 N71-22984		

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-343-708		US-PATENT-3,384,820
	US-PATENT-3,384,895	c15 N71-23022	NASA-CASE-XNS-01625
c09 N71-22985	NASA-CASE-XNP-03934		US-PATENT-APPL-SN-418933
	US-PATENT-APPL-SN-530958		US-PATENT-CLASS-136-86
	US-PATENT-CLASS-250-83.3		US-PATENT-3,389,017
	US-PATENT-3,379,885	c15 N71-23023	NASA-CASE-XNP-04042
c10 N71-22986	NASA-CASE-XNP-01892		US-PATENT-APPL-SN-605518
	US-PATENT-AEFL-SN-464878		US-PATENT-CLASS-55-204
	US-PATENT-CLASS-328-167		US-PATENT-3,397,512
	US-PATENT-3,375,451	c15 N71-23024	NASA-CASE-XNP-01747
c09 N71-22987	NASA-CASE-XLE-04788		US-PATENT-APPL-SN-413661
	US-PATENT-APPL-SN-537617		US-PATENT-CLASS-251-148
	US-PATENT-CLASS-313-352		US-PATENT-3,341,169
	US-PATENT-3,396,303	c15 N71-23025	NASA-CASE-XNP-08877
c09 N71-22988	NASA-CASE-XGS-03304		US-PATENT-APPL-SN-574282
	US-PATENT-AEFL-SN-483886		US-PATENT-CLASS-62-6
	US-PATENT-CLASS-73-1		US-PATENT-3,367,121
	US-PATENT-3,381,517	c07 N71-23026	NASA-CASE-XNP-02791
c14 N71-22989	NASA-CASE-XLA-01551		US-PATENT-APPL-SN-390251
	US-PATENT-AEFL-SN-422092		US-PATENT-CLASS-178-6
	US-PATENT-CLASS-73-190		US-PATENT-3,383,461
	US-PATENT-3,382,714	c09 N71-23027	NASA-CASE-XNP-01960
c14 N71-22990	NASA-CASE-XMS-04201		US-PATENT-APPL-SN-438135
	US-PATENT-AEFL-SN-507254		US-PATENT-CLASS-29-572
	US-PATENT-CLASS-324-70		US-PATENT-3,340,599
	US-PATENT-3,379,974	c10 N71-23029	NASA-CASE-XGS-03427
c14 N71-22991	NASA-CASE-XLA-01791		US-PATENT-APPL-SN-500446
	US-PATENT-APPL-SN-462763		US-PATENT-CLASS-307-265
	US-PATENT-CLASS-250-227		US-PATENT-3,383,524
	US-PATENT-3,397,318	c11 N71-23030	NASA-CASE-XNP-03578
c14 N71-22992	NASA-CASE-XGS-01023		US-PATENT-APPL-SN-445292
	US-PATENT-AEFL-SN-446131		US-PATENT-CLASS-73-147
	US-PATENT-CLASS-73-65		US-PATENT-3,342,066
	US-PATENT-3,377,845	c10 N71-23033	NASA-CASE-XNP-01318
c14 N71-22993	NASA-CASE-XMS-05365		US-PATENT-AEFL-SN-380965
	US-PATENT-APPL-SN-515484		US-PATENT-CLASS-340-174
	US-PATENT-CLASS-310-8.5		US-PATENT-3,388,387
	US-PATENT-3,387,149	c14 N71-23036	NASA-CASE-XNP-01660
c15 N71-22994	NASA-CASE-XPR-05421		US-PATENT-APPL-SN-578916
	US-PATENT-AEFL-SN-567686		US-PATENT-CLASS-73-4
	US-PATENT-CLASS-24-126		US-PATENT-3,383,903
	US-PATENT-3,378,892	c14 N71-23037	NASA-CASE-XAC-01662
c14 N71-22995	NASA-CASE-XNP-08680		US-PATENT-AEFL-SN-385520
	US-PATENT-APPL-SN-562444		US-PATENT-CLASS-324-117
	US-PATENT-CLASS-73-9		US-PATENT-3,365,665
	US-PATENT-3,376,730	c14 N71-23039	NASA-CASE-XNP-01659
c14 N71-22996	NASA-CASE-XGS-01331		US-PATENT-APPL-SN-410342
	US-PATENT-AEFL-SN-445807		US-PATENT-CLASS-136-240
	US-PATENT-CLASS-250-218		US-PATENT-3,377,208
	US-PATENT-3,388,258	c14 N71-23040	NASA-CASE-XNP-05535
c15 N71-22997	NASA-CASE-XNP-01641		US-PATENT-AEFL-SN-487939
	US-PATENT-APPL-SN-464885		US-PATENT-CLASS-244-1
	US-PATENT-CLASS-308-10		US-PATENT-3,339,863
	US-PATENT-3,378,315	c14 N71-23041	NASA-CASE-XNP-01056
c18 N71-22998	NASA-CASE-XGS-02435		US-PATENT-APPL-SN-377146
	US-PATENT-AEFL-SN-392965		US-PATENT-CLASS-250-41.9
	US-PATENT-CLASS-106-40		US-PATENT-3,340,395
	US-PATENT-3,382,082	c11 N71-23042	NASA-CASE-XNS-02930
c09 N71-22999	NASA-CASE-XLA-00781		US-PATENT-APPL-SN-417253
	US-PATENT-APPL-SN-307271		US-PATENT-CLASS-250-52
	US-PATENT-CLASS-88-14		US-PATENT-3,340,397
	US-PATENT-3,364,813	c26 N71-23043	NASA-CASE-XNP-01959
c07 N71-23001	NASA-CASE-XGS-01812		US-PATENT-APPL-SN-410330
	US-PATENT-AEFL-SN-392973		US-PATENT-CLASS-136-89
	US-PATENT-CLASS-340-174.1		US-PATENT-3,396,057
	US-PATENT-3,380,042	c17 N71-23046	NASA-CASE-XNP-04338
c03 N71-23006	NASA-CASE-XGS-02631		US-PATENT-APPL-SN-461765
	US-PATENT-AEFL-SN-425972		US-PATENT-CLASS-29-182.2
	US-PATENT-CLASS-136-133		US-PATENT-3,421,864
	US-PATENT-3,340,099	c18 N71-23047	NASA-CASE-XLA-01995
c02 N71-23007	NASA-CASE-XNP-04163		US-PATENT-APPL-SN-411945
	US-PATENT-AEFL-SN-424156		US-PATENT-CLASS-148-6.16
	US-PATENT-CLASS-73-189		US-PATENT-3,395,053
	US-PATENT-3,340,732	c15 N71-23048	NASA-CASE-XNP-03972
c31 N71-23008	NASA-CASE-XLA-04804		US-PATENT-APPL-SN-502710
	US-PATENT-AEFL-SN-577546		US-PATENT-CLASS-184-1
	US-PATENT-CLASS-102-49.5		US-PATENT-3,367,445
	US-PATENT-3,384,016	c15 N71-23049	NASA-CASE-XNP-01049
c31 N71-23009	NASA-CASE-XGS-02607		US-PATENT-APPL-SN-506137
	US-PATENT-APPL-SN-474531		US-PATENT-CLASS-339-5
	US-PATENT-CLASS-244-1		US-PATENT-3,375,479
	US-PATENT-3,341,151	c15 N71-23050	NASA-CASE-XNP-01730
c09 N71-23015	NASA-CASE-XGS-02751		US-PATENT-APPL-SN-517869
	US-PATENT-AEFL-SN-491059		US-PATENT-CLASS-228-8
	US-PATENT-CLASS-307-288		US-PATENT-3,373,914
	US-PATENT-3,374,366	c15 N71-23051	NASA-CASE-XAC-01158
c09 N71-23021	NASA-CASE-XAC-02807		US-PATENT-APPL-SN-420250
	US-PATENT-AEFL-SN-456581		US-PATENT-CLASS-137-625.5
	US-PATENT-CLASS-324-120		US-PATENT-3,369,564

ACCESSION NUMBER INDEX

c15 N71-23052	NASA-CASE-XLA-03497	US-PATENT-APPL-SN-522794
	US-PATENT-APPL-SN-392992	US-PATENT-CLASS-313-231
	US-PATENT-CLASS-156-285	US-PATENT-3,413,510
	US-PATENT-3,373,069	
c05 N71-23080	NASA-CASE-XLE-02531	NASA-CASE-XMS-05890
	US-PATENT-APPL-SN-425096	US-PATENT-APPL-SN-650166
	US-PATENT-CLASS-312-1	US-PATENT-CLASS-137-554
	US-PATENT-3,337,279	US-PATENT-3,414,012
c28 N71-23081	NASA-CASE-XNP-02923	NASA-CASE-XNP-04817
	US-PATENT-APPL-SN-494280	US-PATENT-APPL-SN-516152
	US-PATENT-CLASS-60-202	US-PATENT-CLASS-73-12
	US-PATENT-3,367,114	US-PATENT-3,412,598
c10 N71-23084	NASA-CASE-XLA-01219	NASA-CASE-XNP-06509
	US-PATENT-APPL-SN-402978	US-PATENT-APPL-SN-570095
	US-PATENT-CLASS-332-1	US-PATENT-CLASS-73-194
	US-PATENT-3,366,894	US-PATENT-3,411,356
c33 N71-23085	NASA-CASE-XPR-03802	NASA-CASE-XMF-06515
	US-PATENT-APPL-SN-460877	US-PATENT-APPL-SN-548808
	US-PATENT-CLASS-73-190	US-PATENT-CLASS-73-432
	US-PATENT-3,367,182	US-PATENT-3,408,870
c15 N71-23086	NASA-CASE-XMS-04533	NASA-CASE-XNP-06409
	US-PATENT-APPL-SN-557016	US-PATENT-APPL-SN-575930
	US-PATENT-CLASS-202-234	US-PATENT-CLASS-260-448.2
	US-PATENT-3,397,117	US-PATENT-3,433,818
c14 N71-23087	NASA-CASE-XNP-03918	NASA-CASE-XNP-08217
	US-PATENT-APPL-SN-510475	US-PATENT-APPL-SN-688807
	US-PATENT-CLASS-73-88.5	US-PATENT-CLASS-321-2
	US-PATENT-3,388,590	US-PATENT-3,470,443
c18 N71-23088	NASA-CASE-XNP-00597	NASA-CASE-XLA-00941
	US-PATENT-APPL-SN-410325	US-PATENT-APPL-SN-508873
	US-PATENT-CLASS-65-7	US-PATENT-CLASS-250-227
	US-PATENT-3,337,315	US-PATENT-3,407,304
c14 N71-23092	NASA-CASE-XLA-01530	NASA-CASE-XLE-03629
	US-PATENT-APPL-SN-420466	US-PATENT-APPL-SN-554950
	US-PATENT-CLASS-188-1	US-PATENT-CLASS-75-170
	US-PATENT-3,337,004	US-PATENT-3,415,643
c14 N71-23093	NASA-CASE-XLE-03280	NASA-CASE-XFB-05302
	US-PATENT-APPL-SN-517156	US-PATENT-APPL-SN-685463
	US-PATENT-CLASS-73-400	US-PATENT-CLASS-85-7
	US-PATENT-3,379,064	US-PATENT-3,443,472
c05 N71-23096	NASA-CASE-XMS-06064	NASA-CASE-XMS-07487
	US-PATENT-APPL-SN-563646	US-PATENT-APPL-SN-580365
	US-PATENT-CLASS-2-14	US-PATENT-CLASS-244-83
	US-PATENT-3,378,851	US-PATENT-3,409,252
c09 N71-23097	NASA-CASE-XNP-02140	NASA-CASE-XNP-03290
	US-PATENT-APPL-SN-440036	US-PATENT-APPL-SN-479353
	US-PATENT-CLASS-330-61	US-PATENT-CLASS-53-22
	US-PATENT-3,337,812	US-PATENT-3,415,032
c07 N71-23098	NASA-CASE-XGS-00740	NASA-CASE-XLE-04026
	US-PATENT-APPL-SN-353644	US-PATENT-APPL-SN-617770
	US-PATENT-CLASS-325-305	US-PATENT-CLASS-13-26
	US-PATENT-3,341,778	US-PATENT-3,470,304
c10 N71-23099	NASA-CASE-XNP-08875	NASA-CASE-XLA-01907
	US-PATENT-APPL-SN-640455	US-PATENT-APPL-SN-335441
	US-PATENT-CLASS-343-6.5	US-PATENT-CLASS-356-72
	US-PATENT-3,380,049	US-PATENT-3,419,329
c05 N71-23159	NASA-CASE-XNP-06589	NASA-CASE-XLA-01584
	US-PATENT-APPL-SN-543206	US-PATENT-APPL-SN-416943
	US-PATENT-CLASS-5-82	US-PATENT-CLASS-250-203
	US-PATENT-3,343,180	US-PATENT-3,389,260
c05 N71-23161	NASA-CASE-XAC-07043	NASA-CASE-XMS-04919
	US-PATENT-APPL-SN-566397	US-PATENT-APPL-SN-516155
	US-PATENT-CLASS-2-2.1	US-PATENT-CLASS-307-263
	US-PATENT-3,405,406	US-PATENT-3,417,266
c14 N71-23174	NASA-CASE-XGS-02610	NASA-CASE-XNP-00952
	US-PATENT-APPL-SN-491054	US-PATENT-APPL-SN-388967
	US-PATENT-CLASS-321-60	US-PATENT-CLASS-317-148.5
	US-PATENT-3,417,316	US-PATENT-3,417,298
c14 N71-23175	NASA-CASE-XKS-03509	NASA-CASE-XNP-01669
	US-PATENT-APPL-SN-566392	US-PATENT-APPL-SN-399419
	US-PATENT-CLASS-356-166	US-PATENT-CLASS-74-5.47
	US-PATENT-3,414,358	US-PATENT-3,415,126
c04 N71-23185	NASA-CASE-XAC-05422	NASA-CASE-XLE-10715
	US-PATENT-APPL-SN-483885	US-PATENT-APPL-SN-603397
	US-PATENT-CLASS-128-2.05	US-PATENT-CLASS-252-62.3
	US-PATENT-3,412,729	US-PATENT-3,409,554
c03 N71-23187	NASA-CASE-XGS-03390	NASA-CASE-XNP-06942
	US-PATENT-APPL-SN-551182	US-PATENT-APPL-SN-563651
	US-PATENT-CLASS-136-89	US-PATENT-CLASS-60-202
	US-PATENT-3,419,433	US-PATENT-3,412,559
c09 N71-23188	NASA-CASE-XNP-14301	NASA-CASE-XNP-04819
	US-PATENT-APPL-SN-697341	US-PATENT-APPL-SN-502701
	US-PATENT-CLASS-321-2	US-PATENT-CLASS-340-146.2
	US-PATENT-3,470,446	US-PATENT-3,390,378
c09 N71-23189	NASA-CASE-XNP-06028	NASA-CASE-XGS-03632
	US-PATENT-APPL-SN-649356	US-PATENT-APPL-SN-502739
	US-PATENT-CLASS-315-26	US-PATENT-CLASS-307-260
	US-PATENT-3,431,460	US-PATENT-3,390,282
c09 N71-23190	NASA-CASE-XLE-04501	NASA-CASE-XLA-03356
		US-PATENT-APPL-SN-536216
c09 N71-23191		
c14 N71-23225		
c14 N71-23226		
c14 N71-23227		
c06 N71-23230		
c03 N71-23239		
c14 N71-23240		
c17 N71-23248		
c15 N71-23254		
c15 N71-23255		
c15 N71-23256		
c14 N71-23267		
c14 N71-23268		
c14 N71-23269		
c09 N71-23270		
c10 N71-23271		
c21 N71-23289		
c26 N71-23292		
c28 N71-23293		
c08 N71-23295		
c09 N71-23311		
c10 N71-23315		

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-307-234		US-PATENT-3,390,020
	US-PATENT-3,448,290	c18 N71-23658	NASA-CASE-XLE-02647
c09 N71-23316	NASA-CASE-XMS-09352		US-PATENT-APPL-SN-430226
	US-PATENT-APPL-SN-564919		US-PATENT-CLASS-220-9
	US-PATENT-CLASS-323-22		US-PATENT-3,392,864
	US-PATENT-3,417,321	c10 N71-23662	NASA-CASE-XGS-01118
c05 N71-23317	NASA-CASE-XMS-06061		US-PATENT-APPL-SN-408442
	US-PATENT-APPL-SN-605092		US-PATENT-CLASS-235-154
	US-PATENT-CLASS-307-260		US-PATENT-3,399,299
c03 N71-23336	US-PATENT-3,467,837	c10 N71-23663	NASA-CASE-XKS-04631
	NASA-CASE-XGS-01513		US-PATENT-APPL-SN-663180
	US-PATENT-APPL-SN-502756		US-PATENT-CLASS-200-82
	US-PATENT-CLASS-136-166		US-PATENT-3,433,909
	US-PATENT-3,390,017	c10 N71-23669	NASA-CASE-XAC-10607
c03 N71-23354	NASA-CASE-XLE-04535		US-PATENT-APPL-SN-694345
	US-PATENT-APPL-SN-588671		US-PATENT-CLASS-331-111
	US-PATENT-CLASS-250-212		US-PATENT-3,470,495
	US-PATENT-3,437,818	c14 N71-23698	NASA-CASE-XGS-08259
c17 N71-23365	NASA-CASE-XNP-03063		US-PATENT-APPL-SN-666551
	US-PATENT-APPL-SN-521994		US-PATENT-CLASS-242-192
	US-PATENT-CLASS-75-172		US-PATENT-3,460,781
	US-PATENT-3,413,115	c14 N71-23699	NASA-CASE-XNF-10289
c14 N71-23401	NASA-CASE-XGS-03230		US-PATENT-APPL-SN-674356
	US-PATENT-APPL-SN-517158		US-PATENT-CLASS-324-72
	US-PATENT-CLASS-250-83		US-PATENT-3,470,466
	US-PATENT-3,419,992	c18 N71-23710	NASA-CASE-XLE-08511
c07 N71-23405	NASA-CASE-XGS-01537		US-PATENT-APPL-SN-635972
	US-PATENT-APPL-SN-432026		US-PATENT-CLASS-29-182.1
	US-PATENT-CLASS-325-163		US-PATENT-3,419,363
	US-PATENT-3,417,332	c30 N71-23723	NASA-CASE-XNP-09832
c09 N71-23443	NASA-CASE-XLE-02823		US-PATENT-APPL-SN-632163
	US-PATENT-APPL-SN-491058		US-PATENT-CLASS-343-100
	US-PATENT-CLASS-310-10		US-PATENT-3,417,399
	US-PATENT-3,393,332	c14 N71-23725	NASA-CASE-XGS-01013
c03 N71-23449	NASA-CASE-XLE-08569		US-PATENT-APPL-SN-665209
	US-PATENT-APPL-SN-641420		US-PATENT-CLASS-73-133
	US-PATENT-CLASS-136-89		US-PATENT-3,460,381
	US-PATENT-3,472,698	c14 N71-23726	NASA-CASE-XNF-05224
c01 N71-23497	NASA-CASE-XLA-01486		US-PATENT-APPL-SN-660842
	US-PATENT-APPL-SN-484485		US-PATENT-CLASS-73-189
	US-PATENT-CLASS-244-13		US-PATENT-3,465,584
	US-PATENT-3,392,936	c14 N71-23755	NASA-CASE-XNF-04134
c06 N71-23495	NASA-CASE-XNP-03835		US-PATENT-APPL-SN-610723
	US-PATENT-APPL-SN-456874		US-PATENT-CLASS-73-4
	US-PATENT-CLASS-44-77		US-PATENT-3,472,059
	US-PATENT-3,393,059	c14 N71-23790	NASA-CASE-XAC-04885
c06 N71-23500	NASA-CASE-XNP-03250		US-PATENT-APPL-SN-573432
	US-PATENT-APPL-SN-485058		US-PATENT-CLASS-73-141
	US-PATENT-CLASS-260-85.5		US-PATENT-3,415,116
	US-PATENT-3,419,537	c14 N71-23797	NASA-CASE-XNF-06510
c09 N71-23525	NASA-CASE-XGS-02317		US-PATENT-APPL-SN-562445
	US-PATENT-APPL-SN-576183		US-PATENT-CLASS-250-203
	US-PATENT-CLASS-328-61		US-PATENT-3,417,247
	US-PATENT-3,464,018	c15 N71-23798	NASA-CASE-XNF-02330
c06 N71-23527	NASA-CASE-XLE-01997		US-PATENT-APPL-SN-608944
	US-PATENT-APPL-SN-427990		US-PATENT-CLASS-219-130
	US-PATENT-CLASS-23-230		US-PATENT-3,469,069
	US-PATENT-3,472,625	c15 N71-23809	NASA-CASE-XAC-10019
c10 N71-23543	NASA-CASE-XMS-00913		US-PATENT-APPL-SN-686209
	US-PATENT-APPL-SN-416945		US-PATENT-CLASS-74-89.18
	US-PATENT-CLASS-317-31		US-PATENT-3,472,086
	US-PATENT-3,393,347	c15 N71-23810	NASA-CASE-XLE-05033
c10 N71-23544	NASA-CASE-XNP-05382		US-PATENT-APPL-SN-510474
	US-PATENT-APPL-SN-536217		US-PATENT-CLASS-252-12
	US-PATENT-CLASS-332-19		US-PATENT-3,466,243
	US-PATENT-3,393,380	c15 N71-23811	NASA-CASE-XNF-05297
c09 N71-23545	NASA-CASE-XNP-04367		US-PATENT-APPL-SN-640458
	US-PATENT-APPL-SN-457874		US-PATENT-CLASS-72-354
	US-PATENT-CLASS-307-235		US-PATENT-3,443,412
	US-PATENT-3,404,289	c15 N71-23812	NASA-CASE-XNF-07808
c09 N71-23548	NASA-CASE-XNP-06507		US-PATENT-APPL-SN-684178
	US-PATENT-APPL-SN-605099		US-PATENT-CLASS-308-2
	US-PATENT-CLASS-333-98		US-PATENT-3,463,563
	US-PATENT-3,419,827	c15 N71-23815	NASA-CASE-XNF-07069
c09 N71-23573	NASA-CASE-XGS-01418		US-PATENT-APPL-SN-672382
	US-PATENT-APPL-SN-392969		US-PATENT-CLASS-219-125
	US-PATENT-CLASS-333-73		US-PATENT-3,469,068
	US-PATENT-3,393,384	c15 N71-23816	NASA-CASE-XLE-03803
c09 N71-23598	NASA-CASE-XER-11019		US-PATENT-APPL-SN-505765
	US-PATENT-APPL-SN-711971		US-PATENT-CLASS-220-9
	US-PATENT-CLASS-331-78		US-PATENT-3,392,865
	US-PATENT-3,470,489	c15 N71-23817	NASA-CASE-XLE-06773
c22 N71-23599	NASA-CASE-XLE-01903		US-PATENT-APPL-SN-646124
	US-PATENT-APPL-SN-466868		US-PATENT-CLASS-72-467
	US-PATENT-CLASS-310-4		US-PATENT-3,469,436
	US-PATENT-3,393,330	c17 N71-23828	NASA-CASE-XNF-02303
c26 N71-23654	NASA-CASE-XLE-02798		US-PATENT-APPL-SN-453229
	US-PATENT-APPL-SN-660571		US-PATENT-CLASS-148-6.20
	US-PATENT-CLASS-148-1.5		US-PATENT-3,416,975

ACCESSION NUMBER INDEX

c31 N71-23512	NASA-CASE-XMP-05941 US-PATENT-APPL-SN-653277 US-PATENT-CLASS-244-1 US-PATENT-3,443,773	US-PATENT-APPL-SN-576182 US-PATENT-CLASS-165-12 US-PATENT-3,406,742
c28 N71-23968	NASA-CASE-XLE-04857 US-PATENT-APPL-SN-621742 US-PATENT-CLASS-239-127.1 US-PATENT-3,460,759	NASA-CASE-XMP-02392 US-PATENT-APPL-SN-596735 US-PATENT-CLASS-73-49.2 US-PATENT-3,399,574
c32 N71-23971	NASA-CASE-XAC-05632 US-PATENT-APPL-SN-568355 US-PATENT-CLASS-244-77 US-PATENT-3,412,961	NASA-CASE-XIA-04901 US-PATENT-APPL-SN-586325 US-PATENT-CLASS-244-1 US-PATENT-3,405,887
c23 N71-23976	NASA-CASE-XLA-01987 US-PATENT-APPL-SN-542713 US-PATENT-CLASS-346-107 US-PATENT-3,392,403	NASA-CASE-XMP-03692 US-PATENT-APPL-SN-640787 US-PATENT-CLASS-60-263 US-PATENT-3,443,384
c31 N71-24035	NASA-CASE-XLA-01027 US-PATENT-APPL-SN-494283 US-PATENT-CLASS-52-272 US-PATENT-3,416,274	NASA-CASE-NPO-10096 US-PATENT-APPL-SN-730700 US-PATENT-CLASS-329-140 US-PATENT-3,533,001
c15 N71-24042	NASA-CASE-XMP-04731 US-PATENT-APPL-SN-534966 US-PATENT-CLASS-103-48 US-PATENT-3,367,271	NASA-CASE-GSC-10021-1 US-PATENT-APPL-SN-790420 US-PATENT-CLASS-343-7.5 US-PATENT-3,540,045
c15 N71-24043	NASA-CASE-XKS-03338 US-PATENT-APPL-SN-547072 US-PATENT-CLASS-89-1.806 US-PATENT-3,415,156	NASA-CASE-XMP-01306-2 US-PATENT-APPL-SN-684083 US-PATENT-CLASS-328-133 US-PATENT-3,509,475
c15 N71-24044	NASA-CASE-XMP-06888 US-PATENT-APPL-SN-591000 US-PATENT-CLASS-62-40 US-PATENT-3,415,069	NASA-CASE-ARC-10132-1 US-PATENT-APPL-SN-759460 US-PATENT-CLASS-73-398 US-PATENT-3,545,275
c15 N71-24045	NASA-CASE-XGS-04548 US-PATENT-APPL-SN-672383 US-PATENT-CLASS-74-100 US-PATENT-3,460,397	NASA-CASE-MSC-12052-1 US-PATENT-APPL-SN-770371 US-PATENT-CLASS-254-150 US-PATENT-CLASS-254-173
c15 N71-24046	NASA-CASE-XLE-10337 US-PATENT-APPL-SN-594633 US-PATENT-CLASS-252-26 US-PATENT-3,391,080	US-PATENT-CLASS-254-186 US-PATENT-3,545,725
c15 N71-24047	NASA-CASE-XGS-03120 US-PATENT-APPL-SN-485958 US-PATENT-CLASS-156-3 US-PATENT-3,470,043	NASA-CASE-XGS-08718 US-PATENT-APPL-SN-785611 US-PATENT-CLASS-9-9 US-PATENT-CLASS-74-2
c16 N71-24074	NASA-CASE-XLA-03375 US-PATENT-APPL-SN-512562 US-PATENT-CLASS-356-104 US-PATENT-3,446,558	US-PATENT-CLASS-89-1.5 US-PATENT-CLASS-244-1 US-PATENT-CLASS-244-150 US-PATENT-3,540,676
c17 N71-24142	NASA-CASE-XLE-06969 US-PATENT-APPL-SN-655675 US-PATENT-CLASS-148-126 US-PATENT-3,463,679	NASA-CASE-XMP-04758 US-PATENT-APPL-SN-557861 US-PATENT-CLASS-320-17 US-PATENT-3,413,536
c33 N71-24145	NASA-CASE-XLE-03432 US-PATENT-APPL-SN-559349 US-PATENT-CLASS-13-35 US-PATENT-3,409,730	NASA-CASE-XKS-10804 US-PATENT-APPL-SN-691909 US-PATENT-CLASS-35-17 US-PATENT-3,508,347
c05 N71-24147	NASA-CASE-XMS-10269 US-PATENT-APPL-SN-590158 US-PATENT-CLASS-165-46 US-PATENT-3,425,486	NASA-CASE-XMP-09699 US-PATENT-APPL-SN-711972 US-PATENT-CLASS-73-17 US-PATENT-3,546,920
c15 N71-24164	NASA-CASE-XLA-01494 US-PATENT-APPL-SN-499122 US-PATENT-CLASS-156-545 US-PATENT-3,416,988	NASA-CASE-XMP-06092 US-PATENT-APPL-SN-550088 US-PATENT-CLASS-178-7.1 US-PATENT-3,470,318
c16 N71-24170	NASA-CASE-XLA-04295 US-PATENT-APPL-SN-546149 US-PATENT-CLASS-356-107 US-PATENT-3,468,609	NASA-CASE-NPO-10851 US-PATENT-APPL-SN-805406 US-PATENT-CLASS-325-325 US-PATENT-3,551,816
c18 N71-24183	NASA-CASE-XGS-04799 US-PATENT-APPL-SN-452944 US-PATENT-CLASS-106-84 US-PATENT-3,416,939	NASA-CASE-XKS-09340 US-PATENT-APPL-SN-666555 US-PATENT-CLASS-343-703 US-PATENT-3,540,056
c18 N71-24184	NASA-CASE-XMP-02139 US-PATENT-APPL-SN-430777 US-PATENT-CLASS-106-84 US-PATENT-3,434,855	NASA-CASE-FEC-10029 US-PATENT-APPL-SN-760389 US-PATENT-CLASS-128-2.06 US-PATENT-3,547,105
c14 N71-24232	NASA-CASE-XAC-04458 US-PATENT-APPL-SN-534975 US-PATENT-CLASS-73-400 US-PATENT-3,392,586	NASA-CASE-GSC-10118-1 US-PATENT-APPL-SN-783375 US-PATENT-CLASS-179-15 US-PATENT-CLASS-325-4
c14 N71-24233	NASA-CASE-XGS-04478 US-PATENT-APPL-SN-566717 US-PATENT-CLASS-73-88.5 US-PATENT-3,460,378	US-PATENT-CLASS-343-100 US-PATENT-3,546,386
c14 N71-24234	NASA-CASE-XMP-10968 US-PATENT-APPL-SN-644447 US-PATENT-CLASS-73-15.6 US-PATENT-3,469,437	NASA-CASE-NPO-10388 US-PATENT-APPL-SN-725432 US-PATENT-CLASS-179-15 US-PATENT-CLASS-324-77
c33 N71-24276	NASA-CASE-XLA-02059	US-PATENT-3,548,107 NASA-CASE-XMS-09635 US-PATENT-APPL-SN-586329 US-PATENT-CLASS-2-2.1 US-PATENT-3,516,091
		NASA-CASE-GSC-10131-1

ACCESSION NUMBER INDEX

US-PATENT-APPL-SN-754055
 US-PATENT-CLASS-340-172.5
 US-PATENT-3,546,684
 c07 N71-24625 NASA-CASE-XNS-09610
 US-PATENT-APPL-SN-766170
 US-PATENT-CLASS-343-113
 US-PATENT-3,540,054
 c08 N71-24633 NASA-CASE-NPO-10567
 US-PATENT-APPL-SN-679055
 US-PATENT-CLASS-235-153
 US-PATENT-3,517,171
 c08 N71-24650 NASA-CASE-NPO-10150
 US-PATENT-APPL-SN-660843
 US-PATENT-CLASS-340-347
 US-PATENT-3,537,103
 c15 N71-24679 NASA-CASE-XNP-10475
 US-PATENT-APPL-SN-763868
 US-PATENT-CLASS-72-369
 US-PATENT-3,546,917
 c03 N71-24681 NASA-CASE-XLE-08569-2
 US-PATENT-APPL-SN-829825
 US-PATENT-CLASS-29-572
 US-PATENT-3,541,679
 c12 N71-24692 NASA-CASE-XFR-02007
 US-PATENT-APPL-SN-378080
 US-PATENT-CLASS-73-389
 US-PATENT-3,273,399
 c14 N71-24693 NASA-CASE-XNP-04415
 US-PATENT-APPL-SN-644446
 US-PATENT-CLASS-33-174
 US-PATENT-3,360,864
 c15 N71-24694 NASA-CASE-GSC-10306-1
 US-PATENT-APPL-SN-789278
 US-PATENT-CLASS-248-358
 US-PATENT-3,537,672
 c15 N71-24695 NASA-CASE-XNP-06936
 US-PATENT-APPL-SN-640786
 US-PATENT-CLASS-318-382
 US-PATENT-3,487,281
 c15 N71-24696 NASA-CASE-NPO-10173
 US-PATENT-APPL-SN-796360
 US-PATENT-CLASS-310-101
 US-PATENT-3,535,570
 c09 N71-24717 NASA-CASE-XNP-08804
 US-PATENT-APPL-SN-683606
 US-PATENT-CLASS-324-181
 US-PATENT-3,543,159
 c03 N71-24718 NASA-CASE-HSC-10960-1
 US-PATENT-APPL-SN-751198
 US-PATENT-CLASS-204-305
 US-PATENT-3,547,801
 c03 N71-24719 NASA-CASE-GSC-10487-1
 US-PATENT-APPL-SN-828983
 US-PATENT-CLASS-320-39
 US-PATENT-3,541,422
 c23 N71-24725 NASA-CASE-GSC-10188-1
 US-PATENT-APPL-SN-791888
 US-PATENT-CLASS-62-384
 US-PATENT-3,545,226
 c05 N71-24728 NASA-CASE-HSC-12243-1
 US-PATENT-APPL-SN-857445
 US-PATENT-CLASS-244-1
 US-PATENT-3,537,668
 c05 N71-24729 NASA-CASE-HSC-13282-1
 US-PATENT-APPL-SN-8498
 US-PATENT-CLASS-128-2.1
 US-PATENT-3,548,812
 c05 N71-24730 NASA-CASE-XNS-09637-1
 US-PATENT-APPL-SN-785710
 US-PATENT-CLASS-2-2.1
 US-PATENT-3,537,107
 c28 N71-24736 NASA-CASE-XLE-03157
 US-PATENT-APPL-SN-591014
 US-PATENT-CLASS-60-240
 US-PATENT-3,408,816
 c05 N71-24738 NASA-CASE-ARC-10100-1
 US-PATENT-APPL-SN-797058
 US-PATENT-CLASS-128-24
 US-PATENT-CLASS-128-25
 US-PATENT-3,550,585
 c06 N71-24739 NASA-CASE-ARC-10098-1
 US-PATENT-APPL-SN-702967
 US-PATENT-CLASS-260-2.5
 US-PATENT-3,549,564
 c06 N71-24740 NASA-CASE-XNP-03074
 US-PATENT-APPL-SN-593595
 US-PATENT-CLASS-260-72.5
 US-PATENT-3,516,971
 c07 N71-24741 NASA-CASE-NPO-10118

US-PATENT-APPL-SN-704465
 US-PATENT-CLASS-235-152
 US-PATENT-3,541,314
 c07 N71-24742 NASA-CASE-NPO-10140
 US-PATENT-APPL-SN-691737
 US-PATENT-CLASS-187-7.1
 US-PATENT-3,541,250
 c31 N71-24750 NASA-CASE-XGS-01654
 US-PATENT-APPL-SN-434148
 US-PATENT-CLASS-102-50
 US-PATENT-3,282,541
 c10 N71-24798 NASA-CASE-XLE-03061-1
 US-PATENT-APPL-SN-632152
 US-PATENT-CLASS-340-412
 US-PATENT-3,546,694
 c10 N71-24799 NASA-CASE-XNP-06505
 US-PATENT-APPL-SN-562933
 US-PATENT-CLASS-307-254
 US-PATENT-3,501,648
 c09 N71-24800 NASA-CASE-EBC-10075
 US-PATENT-APPL-SN-775870
 US-PATENT-CLASS-321-45
 US-PATENT-3,539,905
 c09 N71-24803 NASA-CASE-NPO-10242
 US-PATENT-APPL-SN-749181
 US-PATENT-CLASS-307-88
 US-PATENT-3,541,346
 c09 N71-24804 NASA-CASE-GSC-10299-1
 US-PATENT-APPL-SN-636367
 US-PATENT-CLASS-343-100
 US-PATENT-3,540,050
 c09 N71-24805 NASA-CASE-XNP-06892
 US-PATENT-APPL-SN-757875
 US-PATENT-CLASS-318-318
 US-PATENT-3,546,553
 c09 N71-24806 NASA-CASE-NPO-10198
 US-PATENT-APPL-SN-723804
 US-PATENT-CLASS-328-165
 US-PATENT-3,550,023
 c09 N71-24807 NASA-CASE-HFS-14114-2
 US-PATENT-APPL-SN-854815
 US-PATENT-CLASS-165-105
 US-PATENT-CLASS-165-107
 US-PATENT-CLASS-165-138
 US-PATENT-3,537,515
 c09 N71-24808 NASA-CASE-XNP-08880
 US-PATENT-APPL-SN-605094
 US-PATENT-CLASS-333-98
 US-PATENT-3,416,106
 c14 N71-24809 NASA-CASE-XNP-08961
 US-PATENT-APPL-SN-661170
 US-PATENT-CLASS-250-84
 US-PATENT-3,487,216
 c31 N71-24813 NASA-CASE-IAC-06029-1
 US-PATENT-APPL-SN-588651
 US-PATENT-CLASS-343-100
 US-PATENT-3,540,048
 c16 N71-24828 NASA-CASE-IAC-10770-1
 US-PATENT-APPL-SN-690997
 US-PATENT-CLASS-356-28
 US-PATENT-3,547,540
 c17 N71-24830 NASA-CASE-XNP-04148
 US-PATENT-APPL-SN-536210
 US-PATENT-CLASS-204-38
 US-PATENT-3,472,742
 c16 N71-24831 NASA-CASE-NPO-10548
 US-PATENT-APPL-SN-775072
 US-PATENT-CLASS-330-4
 US-PATENT-3,486,123
 c16 N71-24832 NASA-CASE-EBC-10178
 US-PATENT-APPL-SN-800973
 US-PATENT-CLASS-331-94.5
 US-PATENT-3,550,034
 c15 N71-24833 NASA-CASE-XNP-03793
 US-PATENT-APPL-SN-453225
 US-PATENT-CLASS-72-56
 US-PATENT-3,360,972
 c15 N71-24834 NASA-CASE-XNP-05634
 US-PATENT-APPL-SN-605096
 US-PATENT-CLASS-73-95
 US-PATENT-3,460,379
 c15 N71-24835 NASA-CASE-NPO-10123
 US-PATENT-APPL-SN-731388
 US-PATENT-CLASS-128-272
 US-PATENT-CLASS-128-275
 US-PATENT-3,540,444
 c15 N71-24836 NASA-CASE-XLE-08917-2
 US-PATENT-APPL-SN-852131

ACCESSION NUMBER INDEX

c07 N71-24840	US-PATENT-CLASS-72-60 US-PATENT-3,541,825 NASA-CASE-HFO-10649	c15 N71-24903	US-PATENT-APPL-SN-749149 US-PATENT-CLASS-294-83 US-PATENT-3,508,779
c09 N71-24841	US-PATENT-APPL-SN-795182 US-PATENT-CLASS-325-113 US-PATENT-3,541,450 NASA-CASE-XNP-09771		US-PATENT-CLASS-HFS-20395 US-PATENT-APPL-SN-830715 US-PATENT-CLASS-285-38 US-PATENT-CLASS-285-314 US-PATENT-CLASS-285-317 US-PATENT-CLASS-285-406
c09 N71-24842	US-PATENT-APPL-SN-698630 US-PATENT-CLASS-333-83 US-PATENT-3,541,479 NASA-CASE-HSC-12209	c09 N71-24904	US-PATENT-3,545,792 NASA-CASE-HFS-20385 US-PATENT-APPL-SN-853716 US-PATENT-CLASS-310-10 US-PATENT-3,541,361
c09 N71-24843	US-PATENT-APPL-SN-881039 US-PATENT-CLASS-343-797 US-PATENT-3,546,705 NASA-CASE-XMP-06617	c15 N71-24910	US-PATENT-CLASS-HFS-20385 US-PATENT-APPL-SN-853716 US-PATENT-CLASS-310-10 US-PATENT-3,541,361 NASA-CASE-HSC-10045
c10 N71-24844	US-PATENT-APPL-SN-656993 US-PATENT-CLASS-324-71 US-PATENT-3,541,439 NASA-CASE-HFO-10169	c17 N71-24911	US-PATENT-APPL-SN-763685 US-PATENT-CLASS-73-40.7 US-PATENT-3,548,636 NASA-CASE-XLE-04946
c23 N71-24857	US-PATENT-APPL-SN-701733 US-PATENT-CLASS-328-171 US-PATENT-3,541,459 NASA-CASE-XMS-06056-1	c18 N71-24934	US-PATENT-APPL-SN-605093 US-PATENT-CLASS-118-308 US-PATENT-3,472,202 NASA-CASE-HFO-10051
c33 N71-24858	US-PATENT-APPL-SN-532006 US-PATENT-CLASS-350-189 US-PATENT-3,472,577 NASA-CASE-HFS-14253	c21 N71-24948	US-PATENT-APPL-SN-711898 US-PATENT-CLASS-73-38 US-PATENT-3,548,633 NASA-CASE-HSC-10090
c10 N71-24861	US-PATENT-APPL-SN-709622 US-PATENT-CLASS-161-69 US-PATENT-3,551,266 NASA-CASE-XMP-05195	c11 N71-24964	US-PATENT-APPL-SN-811542 US-PATENT-CLASS-343-112 US-PATENT-3,550,129 NASA-CASE-HFO-10141
c10 N71-24862	US-PATENT-APPL-SN-785595 US-PATENT-CLASS-318-599 US-PATENT-3,523,228 NASA-CASE-PRC-10010	c15 N71-24984	US-PATENT-APPL-SN-673227 US-PATENT-CLASS-62-55.5 US-PATENT-3,443,390 NASA-CASE-HFS-14971
c10 N71-24863	US-PATENT-APPL-SN-771937 US-PATENT-CLASS-307-235 US-PATENT-3,543,050 NASA-CASE-XMP-02966	c11 N71-24985	US-PATENT-APPL-SN-827579 US-PATENT-CLASS-74-468 US-PATENT-3,541,875 NASA-CASE-KSC-10126
c14 N71-24864	US-PATENT-APPL-SN-560968 US-PATENT-CLASS-324-70 US-PATENT-3,406,336 NASA-CASE-XLE-04503	c10 N71-25139	US-PATENT-APPL-SN-845973 US-PATENT-CLASS-73-15 US-PATENT-3,545,252 NASA-CASE-HFS-10068
c15 N71-24865	US-PATENT-APPL-SN-606463 US-PATENT-CLASS-250-225 US-PATENT-3,546,471 NASA-CASE-XMP-05114-3	c28 N71-25213	US-PATENT-APPL-SN-700541 US-PATENT-CLASS-321-9 US-PATENT-3,487,288 NASA-CASE-GSC-10709-1
c23 N71-24868	US-PATENT-APPL-SN-837378 US-PATENT-CLASS-72-56 US-PATENT-3,540,250 NASA-CASE-ERC-10001	c33 N71-25351	US-PATENT-APPL-SN-791288 US-PATENT-CLASS-60-202 US-PATENT-3,545,208 NASA-CASE-HFS-14023
c15 N71-24875	US-PATENT-APPL-SN-712099 US-PATENT-CLASS-350-310 US-PATENT-3,540,802 NASA-CASE-XLA-06199		US-PATENT-APPL-SN-795217 US-PATENT-CLASS-52-249 US-PATENT-CLASS-52-404 US-PATENT-CLASS-62-45
c33 N71-24876	US-PATENT-APPL-SN-702911 US-PATENT-CLASS-148-6.11 US-PATENT-3,540,942 NASA-CASE-XNP-05524	c33 N71-25353	US-PATENT-CLASS-161-161 US-PATENT-CLASS-220-9 US-PATENT-3,540,615 NASA-CASE-HFS-20355
c08 N71-24890	US-PATENT-APPL-SN-250567 US-PATENT-CLASS-165-2 US-PATENT-3,270,802 NASA-CASE-XKS-06167		US-PATENT-APPL-SN-845974 US-PATENT-CLASS-165-104 US-PATENT-CLASS-165-105 US-PATENT-CLASS-165-133
c08 N71-24891	US-PATENT-APPL-SN-649076 US-PATENT-CLASS-235-155 US-PATENT-3,535,497 NASA-CASE-XNP-09759	c32 N71-25360	US-PATENT-CLASS-219-378 US-PATENT-CLASS-219-530 US-PATENT-CLASS-244-1 US-PATENT-3,548,930
c09 N71-24892	US-PATENT-APPL-SN-606462 US-PATENT-CLASS-235-92 US-PATENT-3,541,312 NASA-CASE-HFO-10716	c31 N71-25434	US-PATENT-CLASS-244-1 NASA-CASE-XLA-08530 US-PATENT-APPL-SN-808577 US-PATENT-CLASS-73-90
c09 N71-24893	US-PATENT-APPL-SN-851394 US-PATENT-CLASS-307-104 US-PATENT-CLASS-317-123 US-PATENT-CLASS-317-148.5		US-PATENT-3,546,931 NASA-CASE-HSC-13047-1 US-PATENT-APPL-SN-850586 US-PATENT-CLASS-244-1
c15 N71-24895	US-PATENT-3,549,955 NASA-CASE-ERC-10125 US-PATENT-APPL-SN-773029 US-PATENT-CLASS-323-56	c26 N71-25490	US-PATENT-CLASS-244-113 US-PATENT-CLASS-244-138 US-PATENT-3,547,376 NASA-CASE-ERC-10088
c15 N71-24896	US-PATENT-3,541,428 NASA-CASE-XLA-07473 US-PATENT-APPL-SN-839935 US-PATENT-CLASS-318-265	c24 N71-25555	US-PATENT-APPL-SN-760927 US-PATENT-CLASS-73-141 US-PATENT-3,537,305 NASA-CASE-XNP-09469
c15 N71-24897	US-PATENT-3,546,552 NASA-CASE-ERC-10034 US-PATENT-APPL-SN-763706 US-PATENT-CLASS-250-43.5	c10 N71-25865	US-PATENT-CLASS-204-168 US-PATENT-3,540,989 NASA-CASE-KSC-10002 US-PATENT-APPL-SN-782956
	US-PATENT-3,549,882 NASA-CASE-XLA-03538		US-PATENT-CLASS-178-69.5 US-PATENT-3,567,861

ACCESSION NUMBER INDEX

c09 N71-25866	NASA-CASE-ARC-10003-1 US-PATENT-APPL-SN-717822 US-PATENT-CLASS-178-66 US-PATENT-CLASS-179-100.2 US-PATENT-3,549,799	c07 N71-26101	NASA-CASE-NEO-10231 US-PATENT-APPL-SN-701767 US-PATENT-CLASS-343-786 US-PATENT-3,534,376
c18 N71-25881	NASA-CASE-XGS-05180 US-PATENT-APPL-SN-721607 US-PATENT-CLASS-260-37 US-PATENT-3,567,677	c07 N71-26102	NASA-CASE-INE-06611 NASA-CASE-INE-09830 US-PATENT-APPL-SN-593607 US-PATENT-CLASS-178-6.6 US-PATENT-3,474,192
c10 N71-25882	NASA-CASE-GSC-10022-1 US-PATENT-APPL-SN-785546 US-PATENT-CLASS-331-113 US-PATENT-3,559,096	c10 N71-26103	NASA-CASE-XNP-04623 US-PATENT-APPL-SN-510150 US-PATENT-CLASS-340-146.1 US-PATENT-3,474,413
c14 N71-25892	NASA-CASE-XLA-04555-1 US-PATENT-APPL-SN-594584 US-PATENT-CLASS-148-13 US-PATENT-3,468,727	c02 N71-26110	NASA-CASE-LAR-10249-1 US-PATENT-APPL-SN-835060 US-PATENT-CLASS-244-42 US-PATENT-3,576,301
c10 N71-25899	NASA-CASE-LFW-10345-1 US-PATENT-APPL-SN-805298 US-PATENT-CLASS-137-81.5 US-PATENT-CLASS-235-201 US-PATENT-3,568,702	c09 N71-26133	NASA-CASE-MFS-20075 US-PATENT-APPL-SN-835059 US-PATENT-CLASS-317-101 US-PATENT-CLASS-339-17 US-PATENT-3,575,638
c10 N71-25900	NASA-CASE-ERC-10032 US-PATENT-APPL-SN-757857 US-PATENT-CLASS-333-30 US-PATENT-CLASS-333-72 US-PATENT-3,568,103	c15 N71-26134	NASA-CASE-XKS-07953 US-PATENT-APPL-SN-725405 US-PATENT-CLASS-51-170 US-PATENT-3,553,904
c14 N71-25901	NASA-CASE-XLA-02810 US-PATENT-APPL-SN-764252 US-PATENT-CLASS-250-43.5 US-PATENT-CLASS-250-83.3 US-PATENT-CLASS-340-233 US-PATENT-CLASS-340-285 US-PATENT-3,569,710	c14 N71-26135	NASA-CASE-XAC-03740 US-PATENT-APPL-SN-480211 US-PATENT-CLASS-324-43 US-PATENT-3,564,401
c17 N71-25903	NASA-CASE-XLA-08966-1 US-PATENT-APPL-SN-570678 US-PATENT-CLASS-204-33 US-PATENT-3,468,765	c14 N71-26136	NASA-CASE-XLA-01782 US-PATENT-APPL-SN-576792 US-PATENT-CLASS-73-15.6 US-PATENT-3,472,060
c16 N71-25914	NASA-CASE-XLA-03410 US-PATENT-APPL-SN-512561 US-PATENT-CLASS-250-199 US-PATENT-3,469,087	c14 N71-26137	NASA-CASE-LAR-10305 US-PATENT-APPL-SN-811037 US-PATENT-CLASS-324-0.5 US-PATENT-CLASS-324-58.5 US-PATENT-3,562,631
c10 N71-25917	NASA-CASE-NPO-10595 US-PATENT-APPL-SN-771760 US-PATENT-CLASS-340-347 US-PATENT-3,569,956	c10 N71-26142	NASA-CASE-NPO-10302 US-PATENT-APPL-SN-848811 US-PATENT-CLASS-343-768 US-PATENT-3,553,704
c06 N71-25929	NASA-CASE-NPO-10596 US-PATENT-APPL-SN-756381 US-PATENT-CLASS-260-2.5 US-PATENT-3,557,027	c15 N71-26145	NASA-CASE-FEC-10005 US-PATENT-APPL-SN-756266 US-PATENT-CLASS-33-189 US-PATENT-3,562,919
c10 N71-25950	NASA-CASE-XGS-06226 US-PATENT-APPL-SN-676387 US-PATENT-CLASS-331-113 US-PATENT-3,466,570	c15 N71-26148	NASA-CASE-XMR-05114-2 US-PATENT-APPL-SN-837377 US-PATENT-CLASS-72-56 US-PATENT-3,555,867
c15 N71-25975	NASA-CASE-XMS-10660-1 US-PATENT-APPL-SN-797056 US-PATENT-CLASS-24-205.17 US-PATENT-3,469,289	c18 N71-26153	NASA-CASE-XLE-03940 US-PATENT-APPL-SN-539255 US-PATENT-CLASS-148-126 US-PATENT-3,472,709
c09 N71-25999	NASA-CASE-XGS-05290 US-PATENT-APPL-SN-754019 US-PATENT-CLASS-310-168 US-PATENT-CLASS-310-254 US-PATENT-CLASS-318-138 US-PATENT-CLASS-318-254 US-PATENT-3,569,804	c16 N71-26154	NASA-CASE-FEC-10020 US-PATENT-APPL-SN-709399 US-PATENT-CLASS-350-3.5 US-PATENT-3,540,790
c09 N71-26000	NASA-CASE-XNP-08567 US-PATENT-APPL-SN-640783 US-PATENT-CLASS-307-88 US-PATENT-3,466,459	c18 N71-26155	NASA-CASE-LAR-10373-1 US-PATENT-APPL-SN-761007 US-PATENT-CLASS-260-2.5 US-PATENT-3,481,887
c09 N71-26002	NASA-CASE-XMS-04213-1 US-PATENT-APPL-SN-607484 US-PATENT-CLASS-128-2.1 US-PATENT-3,468,303	c14 N71-26161	NASA-CASE-XLA-08254 US-PATENT-APPL-SN-867843 US-PATENT-CLASS-73-12 US-PATENT-CLASS-73-79 US-PATENT-3,576,127
c03 N71-26084	NASA-CASE-LFW-11358 US-PATENT-APPL-SN-787906 US-PATENT-CLASS-136-6 US-PATENT-3,554,806	c15 N71-26162	NASA-CASE-MSC-15474-1 US-PATENT-APPL-SN-878731 US-PATENT-CLASS-24-263 US-PATENT-3,564,564
c10 N71-26085	NASA-CASE-GSC-10735-1 US-PATENT-APPL-SN-863963 US-PATENT-CLASS-321-2 US-PATENT-3,559,031	c28 N71-26173	NASA-CASE-LFW-10689-1 US-PATENT-APPL-SN-830978 US-PATENT-CLASS-60-202 US-PATENT-3,552,125
c09 N71-26092	NASA-CASE-XNP-07477 US-PATENT-APPL-SN-605098 US-PATENT-CLASS-318-258 US-PATENT-3,501,684	c07 N71-26181	NASA-CASE-MSC-12223-1 US-PATENT-APPL-SN-839941 US-PATENT-CLASS-179-1 US-PATENT-3,555,192
c18 N71-26100	NASA-CASE-XLA-04251 US-PATENT-APPL-SN-657742 US-PATENT-CLASS-117-104 US-PATENT-3,553,002	c09 N71-26182	NASA-CASE-NFO-10625 US-PATENT-APPL-SN-856415 US-PATENT-CLASS-60-23 US-PATENT-CLASS-313-236 US-PATENT-CLASS-313-237 US-PATENT-3,562,575
		c15 N71-26185	NASA-CASE-MFS-14711 US-PATENT-APPL-SN-774266 US-PATENT-CLASS-55-75

ACCESSION NUMBER INDEX

c15 N71-26189	US-PATENT-3,557,534 NASA-CASE-ILX-09527-2 US-PATENT-APPL-SN-840870 US-PATENT-CLASS-308-187 US-PATENT-3,561,828	c10 N71-26415	NASA-CASE-NFO-10003 US-PATENT-APPL-SN-638192 US-PATENT-CLASS-330-13 US-PATENT-3,461,393
c14 N71-26199	NASA-CASE-NPO-10691 US-PATENT-APPL-SN-816988 US-PATENT-CLASS-73-61 US-PATENT-3,566,676	c10 N71-26418	NASA-CASE-XGS-04224 US-PATENT-APPL-SN-568364 US-PATENT-CLASS-340-174 US-PATENT-3,483,535
c23 N71-26206	NASA-CASE-XGS-08269 US-PATENT-APPL-SN-787393 US-PATENT-CLASS-356-76 US-PATENT-3,554,647	c10 N71-26434	NASA-CASE-XNP-01466 US-PATENT-APPL-SN-487940 US-PATENT-CLASS-340-174 US-PATENT-3,461,437
c15 N71-26243	NASA-CASE-HSC-10959 US-PATENT-APPL-SN-725719 US-PATENT-CLASS-188-1 US-PATENT-3,420,338	c14 N71-26474	NASA-CASE-XMF-03844-1 US-PATENT-APPL-SN-601229 US-PATENT-CLASS-95-44 US-PATENT-3,472,140
c14 N71-26244	NASA-CASE-XMS-06497 US-PATENT-APPL-SN-617778 US-PATENT-CLASS-324-115 US-PATENT-3,464,012	c14 N71-26475	NASA-CASE-XNP-09701 US-PATENT-APPL-SN-584015 US-PATENT-CLASS-250-83.3 US-PATENT-3,461,290
c14 N71-26266	NASA-CASE-XNP-09830 US-PATENT-APPL-SN-632165 US-PATENT-CLASS-324-0.5 US-PATENT-3,474,328	c10 N71-26531	NASA-CASE-GSC-10413 US-PATENT-APPL-SN-789043 US-PATENT-CLASS-317-20 US-PATENT-CLASS-317-33 US-PATENT-3,555,361
c18 N71-26285	NASA-CASE-HSC-12109 US-PATENT-APPL-SN-889376 US-PATENT-CLASS-2-81 US-PATENT-CLASS-2-275 US-PATENT-CLASS-112-402 US-PATENT-3,563,198	c31 N71-26537	NASA-CASE-GSC-10556-1 NASA-CASE-GSC-10557-1 US-PATENT-APPL-SN-808193 US-PATENT-CLASS-74-5.12 US-PATENT-CLASS-244-1 US-PATENT-CLASS-308-1 US-PATENT-3,554,466
c07 N71-26291	NASA-CASE-HQN-10541-1 US-PATENT-APPL-SN-494739 US-PATENT-CLASS-350-96 US-PATENT-3,556,634	c10 N71-26544	NASA-CASE-NPO-10344 US-PATENT-APPL-SN-732921 US-PATENT-CLASS-340-347 US-PATENT-3,566,396
c07 N71-26292	NASA-CASE-XKS-10543 US-PATENT-APPL-SN-719870 US-PATENT-CLASS-325-67 US-PATENT-3,553,586	c12 N71-26546	NASA-CASE-FRC-10022 US-PATENT-APPL-SN-763729 US-PATENT-CLASS-73-194 US-PATENT-3,555,898
c05 N71-26293	NASA-CASE-XPR-07658-1 US-PATENT-APPL-SN-586324 US-PATENT-CLASS-128-2.06 US-PATENT-3,426,746	c10 N71-26577	NASA-CASE-NPO-10214 US-PATENT-APPL-SN-704299 US-PATENT-CLASS-325-41 US-PATENT-3,566,268
c15 N71-26294	NASA-CASE-XNP-02862-1 US-PATENT-APPL-SN-556830 US-PATENT-CLASS-277-13 US-PATENT-3,468,548	c07 N71-26579	NASA-CASE-XMS-06740-1 US-PATENT-APPL-SN-554277 US-PATENT-CLASS-178-6 US-PATENT-3,470,313
c15 N71-26312	NASA-CASE-XNP-01263-2 US-PATENT-APPL-SN-718279 US-PATENT-CLASS-287-189.365 US-PATENT-3,481,638	c15 N71-26611	NASA-CASE-HSC-11817-1 US-PATENT-APPL-SN-7668 US-PATENT-CLASS-165-44 US-PATENT-CLASS-165-86 US-PATENT-CLASS-188-88 US-PATENT-CLASS-244-1 US-PATENT-CLASS-244-57 US-PATENT-3,563,307
c10 N71-26326	NASA-CASE-NPO-10143 US-PATENT-APPL-SN-692331 US-PATENT-CLASS-58-24 US-PATENT-3,472,019	c10 N71-26626	NASA-CASE-GSC-10891-1 US-PATENT-APPL-SN-568620 US-PATENT-CLASS-307-53 US-PATENT-3,480,789
c10 N71-26331	NASA-CASE-XNP-10854 US-PATENT-APPL-SN-668248 US-PATENT-CLASS-330-31 US-PATENT-3,482,179	c14 N71-26627	NASA-CASE-NFS-14017 US-PATENT-APPL-SN-762956 US-PATENT-CLASS-248-183 US-PATENT-CLASS-308-9 US-PATENT-3,559,937
c05 N71-26333	NASA-CASE-XMS-09652-1 US-PATENT-APPL-SN-618969 US-PATENT-CLASS-2-6 US-PATENT-3,473,165	c15 N71-26635	NASA-CASE-ERC-10022 US-PATENT-APPL-SN-874733 US-PATENT-CLASS-74-89.15 US-PATENT-CLASS-74-424.8 US-PATENT-3,576,135
c10 N71-26334	NASA-CASE-ILA-02619 US-PATENT-APPL-SN-796691 US-PATENT-CLASS-317-DIG.3 US-PATENT-CLASS-317-153 US-PATENT-CLASS-340-235 US-PATENT-3,575,641	c28 N71-26642	NASA-CASE-LBW-10106-1 US-PATENT-APPL-SN-758390 US-PATENT-CLASS-60-202 US-PATENT-3,552,124
c10 N71-26339	NASA-CASE-NPO-10185 US-PATENT-APPL-SN-723805 US-PATENT-CLASS-73-432 US-PATENT-3,472,080	c23 N71-26654	NASA-CASE-NPO-10467 US-PATENT-APPL-SN-798277 US-PATENT-CLASS-62-514 US-PATENT-3,564,866
c15 N71-26346	NASA-CASE-ILX-05641-1 US-PATENT-APPL-SN-605091 US-PATENT-CLASS-72-61 US-PATENT-3,461,700	c14 N71-26672	NASA-CASE-ERC-10033 US-PATENT-APPL-SN-801660 US-PATENT-CLASS-73-49.3 US-PATENT-3,559,460
c10 N71-26374	NASA-CASE-GSC-11367 US-PATENT-APPL-SN-675238 US-PATENT-CLASS-331-18 US-PATENT-3,484,712	c15 N71-26673	NASA-CASE-XAC-09489-1 US-PATENT-APPL-SN-694246 US-PATENT-CLASS-356-154 US-PATENT-3,565,530
c12 N71-26387	NASA-CASE-ILA-05541 US-PATENT-APPL-SN-700986 US-PATENT-CLASS-73-301 US-PATENT-3,473,379	c19 N71-26674	NASA-CASE-XGS-04173 US-PATENT-APPL-SN-658964 US-PATENT-CLASS-350-285
c10 N71-26414	NASA-CASE-INP-04958-1 US-PATENT-APPL-SN-048365 US-PATENT-CLASS-321-69 US-PATENT-3,434,037		

ACCESSION NUMBER INDEX

c09 N71-26678	US-PATENT-3,560,081 NASA-CASE-ERC-10013 US-PATENT-APPL-SN-802972 US-PATENT-CLASS-29-25.18 US-PATENT-3,562,881	c11 N71-27036	US-PATENT-3,569,744 NASA-CASE-XNF-09770-3 US-PATENT-APPL-SN-863967 US-PATENT-CLASS-74-18.2 US-PATENT-3,574,286
c32 N71-26681	NASA-CASE-LAR-10098 US-PATENT-APPL-SN-677475 US-PATENT-CLASS-73-71.4 US-PATENT-3,564,906	c09 N71-27053	NASA-CASE-ERC-10113 US-PATENT-APPL-SN-865811 US-PATENT-CLASS-323-48 US-PATENT-CLASS-323-60 US-PATENT-3,571,699
c09 N71-26701	NASA-CASE-NPO-10331 US-PATENT-APPL-SN-757625 US-PATENT-CLASS-118-49.5 US-PATENT-CLASS-204-298 US-PATENT-3,556,048	c07 N71-27056	NASA-CASE-MSC-12205-1 US-PATENT-APPL-SN-882577 US-PATENT-CLASS-325-16 US-PATENT-CLASS-325-23 US-PATENT-CLASS-325-369 US-PATENT-CLASS-343-100 US-PATENT-CLASS-343-117 US-PATENT-CLASS-343-176 US-PATENT-3,568,197
c15 N71-26721	NASA-CASE-LAR-10121-1 US-PATENT-APPL-SN-766244 US-PATENT-CLASS-18-6 US-PATENT-3,562,857	c08 N71-27057	NASA-CASE-XLA-07828 US-PATENT-APPL-SN-770209 US-PATENT-CLASS-318-20.105 US-PATENT-CLASS-325-151.11 US-PATENT-CLASS-340-347DA US-PATENT-3,573,797
c23 N71-26722	NASA-CASE-GSC-10216-1 US-PATENT-APPL-SN-756260 US-PATENT-CLASS-331-94.5 US-PATENT-3,555,455 NASA-CASE-XNP-03413 US-PATENT-APPL-SN-640456 US-PATENT-CLASS-156-212 US-PATENT-3,565,719	c14 N71-27058	NASA-CASE-MSC-13276-1 US-PATENT-APPL-SN-880272 US-PATENT-CLASS-219-505 US-PATENT-3,575,585
c03 N71-26726	US-PATENT-3,560,161 NASA-CASE-IMP-07770-2 US-PATENT-APPL-SN-711903 US-PATENT-CLASS-106-296 US-PATENT-3,576,656	c15 N71-27067	NASA-CASE-XKS-07814 US-PATENT-APPL-SN-672384 US-PATENT-CLASS-182-10 US-PATENT-CLASS-188-65.5 US-PATENT-3,568,795
c06 N71-26754	NASA-CASE-XNP-09451 US-PATENT-APPL-SN-713162 US-PATENT-CLASS-23-253 US-PATENT-3,560,161	c15 N71-27068	NASA-CASE-NFC-10796 US-PATENT-APPL-SN-815760 US-PATENT-CLASS-220-46 US-PATENT-3,568,874
c18 N71-26772	NASA-CASE-IMP-07770-2 US-PATENT-APPL-SN-711903 US-PATENT-CLASS-106-296 US-PATENT-3,576,656	c15 N71-27084	NASA-CASE-NFO-10755 US-PATENT-APPL-SN-816733 US-PATENT-CLASS-417-50 US-PATENT-3,567,339
c17 N71-26773	NASA-CASE-XNP-04262-2 US-PATENT-APPL-SN-684894 US-PATENT-CLASS-75-66 US-PATENT-3,565,607	c02 N71-27088	NASA-CASE-XIA-08967 US-PATENT-APPL-SN-837830 US-PATENT-CLASS-244-90 US-PATENT-3,570,789
c14 N71-26774	NASA-CASE-ERC-11020 US-PATENT-APPL-SN-686248 US-PATENT-CLASS-325-363 US-PATENT-3,564,420	c14 N71-27090	NASA-CASE-ERC-10044-1 US-PATENT-APPL-SN-811892 US-PATENT-CLASS-250-43.5R US-PATENT-CLASS-250-83.6B US-PATENT-CLASS-324-33 US-PATENT-3,575,597
c28 N71-26779	NASA-CASE-XIA-04126 US-PATENT-APPL-SN-467820 US-PATENT-CLASS-86-1 US-PATENT-CLASS-86-20.2 US-PATENT-CLASS-102-101 US-PATENT-CLASS-264-3 US-PATENT-3,570,364	c15 N71-27091	NASA-CASE-NFS-13929 US-PATENT-APPL-SN-779847 US-PATENT-CLASS-152-225 US-PATENT-CLASS-152-250 US-PATENT-3,568,748
c28 N71-26781	NASA-CASE-LEW-10210-1 US-PATENT-APPL-SN-804172 US-PATENT-CLASS-60-202 US-PATENT-CLASS-313-63 US-PATENT-CLASS-315-111 US-PATENT-3,576,107	c28 N71-27094	NASA-CASE-GSC-10710-1 US-PATENT-APPL-SN-828909 US-PATENT-CLASS-73-117.4 US-PATENT-3,572,104
c09 N71-26787	NASA-CASE-XKS-05932 US-PATENT-APPL-SN-752729 US-PATENT-CLASS-240-11.2 US-PATENT-CLASS-240-11.4 US-PATENT-CLASS-240-51.11 US-PATENT-CLASS-313-22 US-PATENT-3,564,234	c28 N71-27095	NASA-CASE-NFS-20325 US-PATENT-APPL-SN-840176 US-PATENT-CLASS-244-1 US-PATENT-3,572,610
c14 N71-26788	NASA-CASE-NFS-20240 US-PATENT-APPL-SN-825259 US-PATENT-CLASS-356-203 US-PATENT-3,563,668	c10 N71-27126	NASA-CASE-LEW-10233 US-PATENT-APPL-SN-750787 US-PATENT-CLASS-307-253 US-PATENT-CLASS-307-300 US-PATENT-3,566,158
c09 N71-27001	NASA-CASE-XGS-11177 US-PATENT-APPL-SN-828921 US-PATENT-CLASS-317-9 US-PATENT-CLASS-317-33 US-PATENT-3,571,656	c15 N71-27135	NASA-CASE-HQN-10541-2 US-PATENT-APPL-SN-822088 US-PATENT-CLASS-219-121 US-PATENT-CLASS-331-94.5 US-PATENT-3,571,555
c14 N71-27005	NASA-CASE-NFS-20261 US-PATENT-APPL-SN-845990 US-PATENT-CLASS-1 US-PATENT-CLASS-141-258 US-PATENT-CLASS-222-49 US-PATENT-CLASS-222-137 US-PATENT-3,568,885	c10 N71-27136	NASA-CASE-GSC-10065-1 US-PATENT-APPL-SN-808462 US-PATENT-CLASS-318-571 US-PATENT-CLASS-318-653 US-PATENT-3,568,028
c15 N71-27006	NASA-CASE-LAR-10083-1 US-PATENT-APPL-SN-837825 US-PATENT-CLASS-73-147 US-PATENT-3,572,112	c10 N71-27137	NASA-CASE-IMP-06234 US-PATENT-APPL-SN-723827 US-PATENT-CLASS-235-92 US-PATENT-CLASS-328-49 US-PATENT-3,567,913
c09 N71-27016	NASA-CASE-GSC-11139 US-PATENT-APPL-SN-756511 US-PATENT-CLASS-307-234 US-PATENT-CLASS-307-246 US-PATENT-CLASS-307-273 US-PATENT-CLASS-328-120 US-PATENT-CLASS-330-30	c15 N71-27146	NASA-CASE-LAR-10193-1 US-PATENT-APPL-SN-794968 US-PATENT-CLASS-188-1 US-PATENT-CLASS-188-103

ACCESSION NUMBER INDEX

c15 N71-27147	US-PATENT-3,568,805 NASA-CASE-MSC-12121-1 US-PATENT-APPL-SN-783374 US-PATENT-CLASS-91-390 US-PATENT-CLASS-91-461 US-PATENT-3,563,135	c10 N71-27272	US-PATENT-CLASS-331-117 US-PATENT-CLASS-331-177 US-PATENT-CLASS-332-30 US-PATENT-3,569,866 NASA-CASE-XLA-08799 US-PATENT-APPL-SN-668242 US-PATENT-CLASS-340-150 US-PATENT-CLASS-340-164 US-PATENT-CLASS-340-166 US-PATENT-CLASS-340-213 US-PATENT-CLASS-340-403 US-PATENT-3,571,800
c15 N71-27169	NASA-CASE-LAR-10106-1 US-PATENT-APPL-SN-810575 US-PATENT-CLASS-188-1 US-PATENT-CLASS-310-51 US-PATENT-3,566,993	c14 N71-27323	US-PATENT-3,571,800 NASA-CASE-NFO-10810 US-PATENT-APPL-SN-805405 US-PATENT-CLASS-73-355 US-PATENT-CLASS-250-83.3 US-PATENT-3,566,122
c18 N71-27170	NASA-CASE-XNP-02221 US-PATENT-APPL-SN-430192 US-PATENT-CLASS-252-301.2 US-PATENT-3,567,651	c21 N71-27324	NASA-CASE-GSC-10555-1 US-PATENT-APPL-SN-785620 US-PATENT-CLASS-244-1 US-PATENT-3,567,155
c16 N71-27183	NASA-CASE-BQN-10541-4 US-PATENT-APPL-SN-822090 US-PATENT-CLASS-250-199 US-PATENT-3,575,602	c14 N71-27325	NASA-CASE-GSC-10441-1 US-PATENT-APPL-SN-782544 US-PATENT-CLASS-324-43 US-PATENT-3,571,700
c15 N71-27184	NASA-CASE-XNP-08124 US-PATENT-APPL-SN-697075 US-PATENT-CLASS-75-63 US-PATENT-3,563,727	c12 N71-27332	NASA-CASE-NFC-10416 US-PATENT-APPL-SN-754020 US-PATENT-CLASS-137-81.5 US-PATENT-3,570,513
c14 N71-27185	NASA-CASE-NPO-10556 US-PATENT-APPL-SN-796405 US-PATENT-CLASS-73-71.6 US-PATENT-3,572,089	c14 N71-27334	NASA-CASE-ERC-10087 US-PATENT-APPL-SN-738315 US-PATENT-CLASS-29-588 US-PATENT-3,566,459
c14 N71-27186	NASA-CASE-XNP-03968 US-PATENT-APPL-SN-719029 US-PATENT-CLASS-60-35.6 US-PATENT-CLASS-174-110.3 US-PATENT-CLASS-324-65 US-PATENT-CLASS-340-227 US-PATENT-3,569,828	c10 N71-27338	NASA-CASE-KSC-10020 US-PATENT-APPL-SN-817482 US-PATENT-CLASS-324-103 US-PATENT-CLASS-324-107 US-PATENT-CLASS-324-133 US-PATENT-CLASS-340-248 US-PATENT-3,571,707
c07 N71-27191	NASA-CASE-NFS-20068 US-PATENT-APPL-SN-797795 US-PATENT-CLASS-174-28 US-PATENT-CLASS-333-95 US-PATENT-CLASS-333-96 US-PATENT-CLASS-343-884 US-PATENT-3,569,875	c07 N71-27341	NASA-CASE-NFO-10343 US-PATENT-APPL-SN-750786 US-PATENT-CLASS-178-7.1 US-PATENT-CLASS-178-7.3 US-PATENT-3,566,027
c08 N71-27210	NASA-CASE-GSC-10097-1 US-PATENT-APPL-SN-762957 US-PATENT-CLASS-29-603 US-PATENT-CLASS-179-100.2 US-PATENT-CLASS-340-174.1 US-PATENT-3,566,045	c06 N71-27363	NASA-CASE-HQR-10364 US-PATENT-APPL-SN-713616 US-PATENT-CLASS-260-2 US-PATENT-3,563,918
c15 N71-27214	NASA-CASE-XLA-08911 US-PATENT-APPL-SN-777764 US-PATENT-CLASS-219-229 US-PATENT-CLASS-228-53 US-PATENT-3,575,336	c09 N71-27364	NASA-CASE-ERC-10065 US-PATENT-APPL-SN-777818 US-PATENT-CLASS-321-61 US-PATENT-CLASS-321-64 US-PATENT-CLASS-322-32 US-PATENT-3,571,693
c14 N71-27215	NASA-CASE-LAR-10204 US-PATENT-APPL-SN-766245 US-PATENT-CLASS-235-92 US-PATENT-CLASS-356-106 US-PATENT-3,572,935	c10 N71-27365	NASA-CASE-NFO-10251 US-PATENT-APPL-SN-774265 US-PATENT-CLASS-35-19 US-PATENT-3,570,143
c09 N71-27232	NASA-CASE-NPO-10607 US-PATENT-APPL-SN-799353 US-PATENT-CLASS-250-83 US-PATENT-CLASS-317-230 US-PATENT-CLASS-317-231 US-PATENT-CLASS-317-238 US-PATENT-3,568,010	c10 N71-27366	NASA-CASE-GSC-10114-1 US-PATENT-APPL-SN-796370 US-PATENT-CLASS-317-33 US-PATENT-CLASS-321-12 US-PATENT-3,571,662
c07 N71-27233	NASA-CASE-GSC-10220-1 US-PATENT-APPL-SN-759256 US-PATENT-CLASS-343-777 US-PATENT-CLASS-343-786 US-PATENT-CLASS-343-799 US-PATENT-CLASS-343-840 US-PATENT-CLASS-343-854 US-PATENT-3,569,976	c15 N71-27372	NASA-CASE-NFO-10070 US-PATENT-APPL-SN-780064 US-PATENT-CLASS-23-259 US-PATENT-3,565,584
c05 N71-27234	NASA-CASE-XPR-07172 US-PATENT-APPL-SN-720041 US-PATENT-CLASS-128-2.05 US-PATENT-3,563,232	c18 N71-27397	NASA-CASE-XNP-02500 US-PATENT-APPL-SN-508169 US-PATENT-CLASS-324-58.5 US-PATENT-CLASS-324-61 US-PATENT-3,569,827
c06 N71-27254	NASA-CASE-NPO-10768 US-PATENT-APPL-SN-770398 US-PATENT-CLASS-260-615 US-PATENT-3,574,770	c14 N71-27407	NASA-CASE-GSC-10376-1 US-PATENT-APPL-SN-806226 US-PATENT-CLASS-307-126 US-PATENT-CLASS-323-20 US-PATENT-3,566,143
c08 N71-27255	NASA-CASE-NPO-12107 US-PATENT-APPL-SN-555189 US-PATENT-CLASS-179-100.2 US-PATENT-CLASS-340-146.1 US-PATENT-CLASS-340-172.5 US-PATENT-3,571,801	c15 N71-27432	NASA-CASE-NFO-10808 US-PATENT-APPL-SN-808192 US-PATENT-CLASS-60-243 US-PATENT-3,568,447
c10 N71-27271	NASA-CASE-XLA-03893 US-PATENT-APPL-SN-779024 US-PATENT-CLASS-331-109	c28 N71-27585	NASA-CASE-NFS-20130 US-PATENT-APPL-SN-809822 US-PATENT-CLASS-244-4 US-PATENT-3,570,785
		c15 N71-27754	NASA-CASE-ABC-10131-1 US-PATENT-APPL-SN-808576 US-PATENT-CLASS-60-51

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-91-361	c15 N71-28740	NASA-CASE-XLA-09346
	US-PATENT-CLASS-91-390		US-PATENT-APPL-SN-820964
	US-PATENT-CLASS-91-448		US-PATENT-CLASS-73-147
	US-PATENT-3,568,572		US-PATENT-CLASS-356-150
c33 N71-27862	NASA-CASE-MFS-14114		US-PATENT-CLASS-356-152
	US-PATENT-APPL-SN-706013		US-PATENT-CLASS-356-153
	US-PATENT-CLASS-310-4		US-PATENT-3,583,815
	US-PATENT-3,535,562	c12 N71-28741	NASA-CASE-XLE-09341
c09 N71-28421	NASA-CASE-NPO-10412		US-PATENT-APPL-SN-780065
	US-PATENT-APPL-SN-768470		US-PATENT-CLASS-137-81.5
	US-PATENT-CLASS-310-4		US-PATENT-3,583,419
	US-PATENT-3,578,992	c17 N71-28747	NASA-CASE-XNP-08881
c07 N71-28429	NASA-CASE-MSC-13201-1		US-PATENT-APPL-SN-732922
	US-PATENT-APPL-SN-789903		US-PATENT-CLASS-161-89
	US-PATENT-CLASS-332-29		US-PATENT-3,579,412
	US-PATENT-CLASS-332-30	c22 N71-28759	NASA-CASE-LEW-10250-1
	US-PATENT-3,579,147		US-PATENT-APPL-SN-732455
c07 N71-28430	NASA-CASE-GSC-10668-1		US-PATENT-CLASS-176-45
	US-PATENT-APPL-SN-743525		US-PATENT-3,574,057
	US-PATENT-CLASS-307-296	c11 N71-28779	NASA-CASE-XNE-00250
	US-PATENT-CLASS-325-185		US-PATENT-APPL-SN-212497
	US-PATENT-CLASS-330-40		US-PATENT-CLASS-181-5
	US-PATENT-CLASS-330-124		US-PATENT-3,260,326
	US-PATENT-CLASS-330-200	c10 N71-28783	NASA-CASE-XMS-02182
	US-PATENT-3,577,092		US-PATENT-APPL-SN-516153
c15 N71-28465	NASA-CASE-ERC-10097		US-PATENT-CLASS-317-100
	US-PATENT-APPL-SN-797059		US-PATENT-3,317,797
	US-PATENT-CLASS-308-170	c06 N71-28807	NASA-CASE-XNP-08674
	US-PATENT-3,583,777		US-PATENT-APPL-SN-617775
c15 N71-28467	NASA-CASE-NPO-10646		US-PATENT-CLASS-260-47
	US-PATENT-APPL-SN-813488		US-PATENT-3,370,039
	US-PATENT-CLASS-64-18	c06 N71-28808	NASA-CASE-XNP-04023
	US-PATENT-3,574,277		US-PATENT-APPL-SN-470902
c09 N71-28468	NASA-CASE-ARC-10137-1		US-PATENT-CLASS-260-429
	US-PATENT-APPL-SN-799013		US-PATENT-3,396,184
	US-PATENT-CLASS-307-265	c07 N71-28809	NASA-CASE-XGS-02290
	US-PATENT-CLASS-307-273		US-PATENT-APPL-SN-544895
	US-PATENT-CLASS-307-288		US-PATENT-CLASS-343-771
	US-PATENT-CLASS-328-207		US-PATENT-3,417,400
	US-PATENT-3,584,311	c09 N71-28810	NASA-CASE-XNE-03916
c16 N71-28554	NASA-CASE-XGS-10518		US-PATENT-APPL-SN-535304
	US-PATENT-APPL-SN-764470		US-PATENT-CLASS-331-113
	US-PATENT-CLASS-335-216		US-PATENT-3,325,749
	US-PATENT-3,541,486	c28 N71-28849	NASA-CASE-XMS-04826
c03 N71-28575	NASA-CASE-LEW-11359		US-PATENT-APPL-SN-521755
	US-PATENT-APPL-SN-787911		US-PATENT-CLASS-60-258
	US-PATENT-CLASS-136-83		US-PATENT-3,318,096
	US-PATENT-3,573,986	c28 N71-28850	NASA-CASE-XNE-01954
c15 N71-28582	NASA-CASE-LEW-10278-1		US-PATENT-APPL-SN-372730
	US-PATENT-APPL-SN-760928		US-PATENT-CLASS-313-230
	US-PATENT-CLASS-117-224		US-PATENT-3,328,624
	US-PATENT-3,573,977	c31 N71-28851	NASA-CASE-XMS-06162
c09 N71-28618	NASA-CASE-ERC-10098		US-PATENT-APPL-SN-610724
	US-PATENT-APPL-SN-779169		US-PATENT-CLASS-244-138
	US-PATENT-CLASS-178-5.2R		US-PATENT-3,330,510
	US-PATENT-CLASS-178-54CF	c33 N71-28852	NASA-CASE-XNP-01310
	US-PATENT-CLASS-178-54PE		US-PATENT-APPL-SN-379771
	US-PATENT-3,582,960		US-PATENT-CLASS-60-266
c05 N71-28619	NASA-CASE-ARC-10153		US-PATENT-3,279,193
	US-PATENT-APPL-SN-783377	c10 N71-28859	NASA-CASE-XNP-01107
	US-PATENT-CLASS-35-29		US-PATENT-APPL-SN-384010
	US-PATENT-CLASS-104-1		US-PATENT-CLASS-330-51
	US-PATENT-CLASS-104-139		US-PATENT-3,389,346
	US-PATENT-CLASS-119-96	c10 N71-28860	NASA-CASE-MSC-13492-1
	US-PATENT-CLASS-238-1		US-PATENT-APPL-SN-53156
	US-PATENT-CLASS-248-361		US-PATENT-CLASS-307-215
	US-PATENT-CLASS-272-70		US-PATENT-CLASS-307-265
	US-PATENT-3,583,322		US-PATENT-CLASS-307-273
c06 N71-28620	NASA-CASE-NPO-10701		US-PATENT-CLASS-328-92
	US-PATENT-APPL-SN-763355		US-PATENT-CLASS-328-207
	US-PATENT-CLASS-260-47		US-PATENT-3,577,014
	US-PATENT-3,576,786	c14 N71-28863	NASA-CASE-ERC-10014
c11 N71-28629	NASA-CASE-KSC-10198		US-PATENT-APPL-SN-815367
	US-PATENT-APPL-SN-845971		US-PATENT-CLASS-250-41.9
	US-PATENT-CLASS-73-15		US-PATENT-CLASS-250-49.5
	US-PATENT-CLASS-73-432		US-PATENT-3,567,927
	US-PATENT-3,578,756	c09 N71-28866	NASA-CASE-MFS-14610
c09 N71-28691	NASA-CASE-MFS-13687		US-PATENT-APPL-SN-885571
	US-PATENT-APPL-SN-723488		US-PATENT-CLASS-318-317
	US-PATENT-CLASS-204-30		US-PATENT-CLASS-318-331
	US-PATENT-3,576,723		US-PATENT-CLASS-318-345
c18 N71-28729	NASA-CASE-LEW-10219-1		US-PATENT-CLASS-318-504
	US-PATENT-APPL-SN-785780		US-PATENT-3,573,583
	US-PATENT-CLASS-148-126	c33 N71-28892	NASA-CASE-XNP-05046
	US-PATENT-3,579,390		US-PATENT-APPL-SN-559350
c10 N71-28739	NASA-CASE-XNP-01068		US-PATENT-CLASS-62-45
	US-PATENT-APPL-SN-375680		US-PATENT-3,365,897
	US-PATENT-CLASS-307-88.5	c07 N71-28900	NASA-CASE-XNP-02389
	US-PATENT-3,271,594		US-PATENT-APPL-SN-516162

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-343-100		US-PATENT-CLASS-250-41.95
	US-PATENT-3,331,071		US-PATENT-3,578,758
c33 N71-28903	NASA-CASE-XLA-01745	c14 N71-28993	NASA-CASE-MES-20044
	US-PATENT-APPL-SN-538907		US-PATENT-APPL-SN-838630
	US-PATENT-CLASS-244-1		US-PATENT-CLASS-250-219
	US-PATENT-3,409,247		US-PATENT-CLASS-356-209
c28 N71-28915	NASA-CASE-LEW-10286-1		US-PATENT-3,574,470
	US-PATENT-APPL-SN-839994	c14 N71-28994	NASA-CASE-IEB-11203
	US-PATENT-CLASS-60-39.36		US-PATENT-APPL-SN-815366
	US-PATENT-CLASS-60-39.65		US-PATENT-CLASS-250-218
	US-PATENT-CLASS-431-352		US-PATENT-CLASS-356-103
	US-PATENT-3,581,492		US-PATENT-3,578,867
c08 N71-28925	NASA-CASE-INP-01012	c09 N71-29008	NASA-CASE-MSC-11277
	US-PATENT-APPL-SN-369338		US-PATENT-APPL-SN-771759
	US-PATENT-CLASS-340-174		US-PATENT-CLASS-317-33
	US-PATENT-3,394,359		US-PATENT-CLASS-317-54
c09 N71-28926	NASA-CASE-IMS-03542		US-PATENT-CLASS-317-60
	US-PATENT-APPL-SN-482952		US-PATENT-CLASS-317-155.5
	US-PATENT-CLASS-307-263		US-PATENT-3,579,041
	US-PATENT-3,364,366	c15 N71-29018	NASA-CASE-XLA-08916
c28 N71-28928	NASA-CASE-INP-00816		US-PATENT-APPL-SN-777765
	US-PATENT-APPL-SN-235588		US-PATENT-CLASS-29-421
	US-PATENT-CLASS-253-77		US-PATENT-3,583,058
	US-PATENT-3,202,398	c15 N71-29032	NASA-CASE-INP-05999
c27 N71-28929	NASA-CASE-INP-00650		US-PATENT-APPL-SN-752946
	US-PATENT-APPL-SN-271823		US-PATENT-CLASS-117-212
	US-PATENT-CLASS-60-39.48		US-PATENT-3,576,669
	US-PATENT-3,170,295	c08 N71-29033	NASA-CASE-GSC-10554-1
c14 N71-28933	NASA-CASE-XLA-08913		US-PATENT-APPL-SN-828984
	US-PATENT-APPL-SN-865109		US-PATENT-CLASS-235-150.1
	US-PATENT-CLASS-204-263		US-PATENT-CLASS-235-150.2
	US-PATENT-3,574,084		US-PATENT-CLASS-245-150.27
c14 N71-28935	NASA-CASE-LAR-10686		US-PATENT-CLASS-235-151.1
	US-PATENT-APPL-SN-280362		US-PATENT-3,578,957
	US-PATENT-CLASS-226-58	c08 N71-29034	NASA-CASE-WFO-11088
	US-PATENT-3,298,582		US-PATENT-APPL-SN-887701
c15 N71-28936	NASA-CASE-IMS-10993		US-PATENT-CLASS-307-207
	US-PATENT-APPL-SN-660573		US-PATENT-CLASS-307-222
	US-PATENT-CLASS-244-1		US-PATENT-CLASS-328-44
	US-PATENT-3,389,877		US-PATENT-CLASS-328-167
c15 N71-28937	NASA-CASE-INP-01855		US-PATENT-3,579,122
	US-PATENT-APPL-SN-408435	c09 N71-29035	NASA-CASE-LEW-10155-1
	US-PATENT-CLASS-285-45		US-PATENT-APPL-SN-889387
	US-PATENT-3,219,365		US-PATENT-CLASS-337-114
c15 N71-28951	NASA-CASE-INP-02278		US-PATENT-CLASS-337-121
	US-PATENT-APPL-SN-11853		US-PATENT-3,579,168
	US-PATENT-CLASS-60-35.55	c18 N71-29040	NASA-CASE-ILE-10910
	US-PATENT-3,132,479		US-PATENT-APPL-SN-751061
c15 N71-28952	NASA-CASE-IAC-00001		US-PATENT-CLASS-148-6
	US-PATENT-APPL-SN-612568		US-PATENT-3,573,996
	US-PATENT-CLASS-318-31	c14 N71-29041	NASA-CASE-XLA-10402
	US-PATENT-2,837,706		US-PATENT-APPL-SN-762935
c14 N71-28958	NASA-CASE-INP-02792		US-PATENT-CLASS-356-76
	US-PATENT-APPL-SN-262596		US-PATENT-3,574,462
	US-PATENT-CLASS-219-413	c03 N71-29044	NASA-CASE-IMS-02063
	US-PATENT-3,197,616		US-PATENT-APPL-SN-422096
c15 N71-28959	NASA-CASE-INP-01848		US-PATENT-CLASS-136-86
	US-PATENT-APPL-SN-359532		US-PATENT-3,382,105
	US-PATENT-CLASS-64-27	c33 N71-29046	NASA-CASE-IBQ-03673
	US-PATENT-3,236,066		US-PATENT-APPL-SN-559055
c10 N71-28960	NASA-CASE-INP-00745		US-PATENT-CLASS-165-86
	US-PATENT-APPL-SN-314570		US-PATENT-3,347,309
	US-PATENT-CLASS-328-67	c23 N71-29049	NASA-CASE-INP-06503
	US-PATENT-3,252,100		US-PATENT-APPL-SN-370989
c16 N71-28963	NASA-CASE-XLA-01090		US-PATENT-CLASS-335-216
	US-PATENT-APPL-SN-274065		US-PATENT-3,273,094
	US-PATENT-CLASS-250-199	c31 N71-29050	NASA-CASE-BQN-00936
	US-PATENT-3,215,842		US-PATENT-APPL-SN-862921
c07 N71-28965	NASA-CASE-GSC-10949-1		US-PATENT-CLASS-244-1
	US-PATENT-APPL-SN-94369		US-PATENT-3,396,920
c07 N71-28979	NASA-CASE-BQN-00937	c33 N71-29051	NASA-CASE-IBF-04208
	US-PATENT-APPL-SN-343760		US-PATENT-APPL-SN-428687
	US-PATENT-CLASS-343-823		US-PATENT-CLASS-73-190
	US-PATENT-3,299,431		US-PATENT-3,372,588
c07 N71-28980	NASA-CASE-XLA-10772	c33 N71-29052	NASA-CASE-MSC-12389
	US-PATENT-APPL-SN-887700		US-PATENT-APPL-SN-229286
	US-PATENT-CLASS-343-708		US-PATENT-CLASS-165-47
	US-PATENT-CLASS-343-784		US-PATENT-3,212,564
	US-PATENT-CLASS-343-872	c33 N71-29053	NASA-CASE-BQN-00938
	US-PATENT-3,579,242		US-PATENT-APPL-SN-300957
c14 N71-28991	NASA-CASE-XLA-06713		US-PATENT-CLASS-60-267
	US-PATENT-APPL-SN-863913		US-PATENT-3,298,175
	US-PATENT-CLASS-324-5	c07 N71-29065	NASA-CASE-ERC-10011
	US-PATENT-CLASS-324-73		US-PATENT-APPL-SN-802818
	US-PATENT-CLASS-340-347AD		US-PATENT-CLASS-333-81
	US-PATENT-3,579,103		US-PATENT-CLASS-350-1
c14 N71-28992	NASA-CASE-ERC-10150		US-PATENT-CLASS-350-286
	US-PATENT-APPL-SN-822519		US-PATENT-3,574,438
	US-PATENT-CLASS-73-40.7	c23 N71-29123	NASA-CASE-IBF-08907

ACCESSION NUMBER INDEX

		US-PATENT-APPL-SN-824042				US-PATENT-APPL-SN-442835	
		US-PATENT-CLASS-350-102				US-PATENT-CLASS-148-174	
		US-PATENT-CLASS-350-288				US-PATENT-3,397,094	
		US-PATENT-CLASS-350-310		c25	N71-29184	NASA-CASE-XLA-00327	
		US-PATENT-3,574,448				US-PATENT-APPL-SN-199199	
c23	N71-29125	NASA-CASE-WFO-11087				US-PATENT-CLASS-315-111	
		US-PATENT-APPL-SN-840359				US-PATENT-3,238,413	
		US-PATENT-CLASS-331-94.5		c14	N71-30026	NASA-CASE-HFS-20096	
		US-PATENT-CLASS-356-153				US-PATENT-APPL-SN-435433	
		US-PATENT-3,574,467				US-PATENT-CLASS-73-432	
c02	N71-29128	NASA-CASE-XAC-00048				US-PATENT-3,396,584	
		US-PATENT-APPL-SN-765264		c23	N71-30027	NASA-CASE-GSC-10700	
		US-PATENT-CLASS-121-38				US-PATENT-APPL-SN-311387	
		US-PATENT-2,898,889				US-PATENT-CLASS-350-2	
c03	N71-29129	NASA-CASE-XGS-01674				US-PATENT-3,394,975	
		US-PATENT-APPL-SN-248985		c15	N71-30028	NASA-CASE-HFS-20830	
		US-PATENT-CLASS-320-13				US-PATENT-APPL-SN-286620	
		US-PATENT-3,118,100				US-PATENT-3,262,395	
c16	N71-29131	NASA-CASE-BRC-10151		c14	N71-30265	NASA-CASE-BQW-10780	
		US-PATENT-APPL-SN-853856				US-PATENT-APPL-SN-247136	
		US-PATENT-CLASS-350-3.5				US-PATENT-CLASS-73-497	
		US-PATENT-3,578,838				US-PATENT-3,270,565	
c15	N71-29132	NASA-CASE-WFO-10431		c23	N71-30292	NASA-CASE-HCN-10781	
		US-PATENT-APPL-SN-865329				US-PATENT-APPL-SN-86018	
		US-PATENT-CLASS-73-49.8				US-PATENT-3,239,660	
		US-PATENT-3,583,239		c18	N71-31140	NASA-CASE-WFO-11433	
c15	N71-29133	NASA-CASE-HFS-20453				US-PATENT-APPL-SN-111123	
		US-PATENT-APPL-SN-885594		c07	N71-33108	NASA-CASE-KSC-10164	
		US-PATENT-CLASS-29-278R				US-PATENT-APPL-SN-782955	
		US-PATENT-CLASS-81-3R				US-PATENT-CLASS-179-1R	
		US-PATENT-CLASS-294-15				US-PATENT-CLASS-179-1VC	
		US-PATENT-CLASS-339-17R				US-PATENT-3,588,359	
		US-PATENT-3,583,744		c09	N71-33109	NASA-CASE-ARC-10101-1	
c14	N71-29134	NASA-CASE-HFS-11204				US-PATENT-APPL-SN-793823	
		US-PATENT-APPL-SN-845991				US-PATENT-CLASS-307-251	
		US-PATENT-CLASS-73-1R				US-PATENT-CLASS-307-261	
		US-PATENT-CLASS-73-304C				US-PATENT-CLASS-321-47	
		US-PATENT-3,578,755				US-PATENT-3,588,671	
c10	N71-29135	NASA-CASE-GSC-10564		c08	N71-33110	NASA-CASE-GSC-10186	
		US-PATENT-APPL-SN-292596				US-PATENT-APPL-SN-713188	
		US-PATENT-CLASS-340-174				US-PATENT-CLASS-235-164	
		US-PATENT-3,348,218				US-PATENT-CLASS-235-175	
c15	N71-29136	NASA-CASE-XLA-00013				US-PATENT-3,588,483	
		US-PATENT-APPL-SN-579121		c10	N71-33129	NASA-CASE-GSC-10667-1	
		US-PATENT-CLASS-308-177				US-PATENT-APPL-SN-749548	
		US-PATENT-2,903,307				US-PATENT-CLASS-330-11	
c17	N71-29137	NASA-CASE-INP-04339				US-PATENT-CLASS-330-16	
		US-PATENT-APPL-SN-451596				US-PATENT-CLASS-330-24	
		US-PATENT-CLASS-264-111				US-PATENT-3,585,514	
		US-PATENT-3,413,393		c31	N71-33160	NASA-CASE-XLA-04063	
c08	N71-29138	NASA-CASE-BRC-10041				US-PATENT-APPL-SN-802948	
		US-PATENT-APPL-SN-889478				US-PATENT-CLASS-179-1	
		US-PATENT-CLASS-307-234				US-PATENT-CLASS-244-1	
		US-PATENT-CLASS-307-265				US-PATENT-CLASS-244-83	
		US-PATENT-CLASS-324-106				US-PATENT-3,586,261	
		US-PATENT-CLASS-328-58		c23	N71-33229	NASA-CASE-MFC-10468	
		US-PATENT-CLASS-332-9R				US-PATENT-APPL-SN-787846	
		US-PATENT-CLASS-332-10				US-PATENT-CLASS-350-55	
		US-PATENT-3,579,146				US-PATENT-CLASS-350-310	
c09	N71-29139	NASA-CASE-XLA-07788				US-PATENT-3,588,220	
		US-PATENT-APPL-SN-874732		c10	N71-33407	NASA-CASE-WFO-10342	
		US-PATENT-CLASS-307-215				US-PATENT-APPL-SN-704446	
		US-PATENT-CLASS-307-247				US-PATENT-CLASS-178-69.5	
		US-PATENT-CLASS-307-265				US-PATENT-CLASS-179-15B8	
		US-PATENT-CLASS-307-273				US-PATENT-CLASS-340-347DD	
		US-PATENT-CLASS-307-294				US-PATENT-3,588,883	
		US-PATENT-CLASS-328-207		c17	N71-33408	NASA-CASE-LFW-10327	
		US-PATENT-3,578,988				US-PATENT-APPL-SN-772006	
c33	N71-29151	NASA-CASE-XLR-00035				US-PATENT-CLASS-148-6.3	
		US-PATENT-APPL-SN-575291				US-PATENT-3,591,426	
		US-PATENT-CLASS-204-37		c03	N71-33409	NASA-CASE-AEC-10050	
		US-PATENT-2,926,123				US-PATENT-APPL-SN-797219	
c33	N71-29152	NASA-CASE-XLR-00027				US-PATENT-CLASS-136-89	
		US-PATENT-APPL-SN-529594				US-PATENT-3,591,420	
		US-PATENT-CLASS-253-39.1		c16	N71-33410	NASA-CASE-WFO-10417	
		US-PATENT-2,956,772				US-PATENT-APPL-SN-753974	
c28	N71-29153	NASA-CASE-HFS-20831				US-PATENT-CLASS-95-11	
		US-PATENT-APPL-SN-238421				US-PATENT-CLASS-331-94.5	
		US-PATENT-CLASS-60-35.54				US-PATENT-CLASS-352-84	
		US-PATENT-3,212,259				US-PATENT-3,587,424	
c28	N71-29154	NASA-CASE-XLR-00155		c15	N71-33518	NASA-CASE-XLA-03661	
		US-PATENT-APPL-SN-348600				US-PATENT-APPL-SN-751266	
		US-PATENT-CLASS-253-77				US-PATENT-CLASS-90-11	
		US-PATENT-2,997,274				US-PATENT-CLASS-408-137	
c27	N71-29155	NASA-CASE-HSC-12390				US-PATENT-3,585,882	
		US-PATENT-APPL-SN-231520		c09	N71-33519	NASA-CASE-BRC-10100	
		US-PATENT-CLASS-222-61				US-PATENT-APPL-SN-766697	
		US-PATENT-3,286,882				US-PATENT-CLASS-313-109.5	
c26	N71-29156	NASA-CASE-INP-01961				US-PATENT-CLASS-313-231	

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-315-108		US-PATENT-APPL-SN-831118
	US-PATENT-CLASS-315-111		US-PATENT-CLASS-33-15A
	US-PATENT-CLASS-340-324		US-PATENT-CLASS-33-204C
	US-PATENT-CLASS-340-336		US-PATENT-CLASS-235-61B9
	US-PATENT-3,588,874		US-PATENT-3,599,335
c07 N71-33606	NASA-CASE-NPO-11031	c09 N72-11224	NASA-CASE-GSC-10614-1
	US-PATENT-APPL-SN-864097		US-PATENT-APPL-SN-822534
	US-PATENT-CLASS-333-6		US-PATENT-CLASS-179-100-2CA
	US-PATENT-CLASS-333-7		US-PATENT-CLASS-179-100-2ND
	US-PATENT-CLASS-333-21A		US-PATENT-CLASS-274-4R
	US-PATENT-3,588,751		US-PATENT-3,592,478
c11 N71-33612	NASA-CASE-XLA-09480	c09 N72-11225	NASA-CASE-KSC-10162
	US-PATENT-APPL-SN-874435		US-PATENT-APPL-SN-817481
	US-PATENT-CLASS-73-147		US-PATENT-CLASS-324-102
	US-PATENT-3,587,306		US-PATENT-CLASS-324-119
c07 N71-33613	NASA-CASE-NPO-10700		US-PATENT-CLASS-324-123R
	US-PATENT-APPL-SN-840308		US-PATENT-3,593,132
	US-PATENT-CLASS-318-227	c10 N72-11256	NASA-CASE-ABC-10042-2
	US-PATENT-CLASS-318-230		US-PATENT-APPL-SN-33159
	US-PATENT-3,588,648		US-PATENT-CLASS-330-107
c07 N71-33656	NASA-CASE-MSC-12165-1		US-PATENT-CLASS-330-109
	US-PATENT-APPL-SN-875849		US-PATENT-3,593,175
	US-PATENT-CLASS-325-347	c14 N72-11363	NASA-CASE-MSC-11847-1
	US-PATENT-CLASS-325-348		US-PATENT-APPL-SN-8497
	US-PATENT-CLASS-325-473		US-PATENT-CLASS-73-149
	US-PATENT-CLASS-325-478		US-PATENT-CLASS-73-290B
	US-PATENT-CLASS-325-480		US-PATENT-3,596,510
	US-PATENT-CLASS-325-482	c14 N72-11364	NASA-CASE-NPO-10778
	US-PATENT-CLASS-328-164		US-PATENT-APPL-SN-865909
	US-PATENT-CLASS-328-165		US-PATENT-CLASS-33-125
	US-PATENT-CLASS-329-145		US-PATENT-CLASS-73-95
	US-PATENT-3,588,705		US-PATENT-CLASS-250-235
c03 N71-34044	NASA-CASE-NPO-11190		US-PATENT-CLASS-356-32
	US-PATENT-APPL-SN-115944		US-PATENT-CLASS-356-167
c09 N71-34212	NASA-CASE-MFS-20935		US-PATENT-3,592,545
	US-PATENT-APPL-SN-136007	c14 N72-11365	NASA-CASE-MFS-20485
c14 N72-10375	NASA-CASE-GSC-11055-1		US-PATENT-APPL-SN-22320
	US-PATENT-APPL-SN-147940		US-PATENT-CLASS-73-194F
c02 N72-11018	NASA-CASE-LAR-10557		US-PATENT-CLASS-250-43.5FC
	US-PATENT-APPL-SN-853746		US-PATENT-3,599,489
	US-PATENT-CLASS-416-115	c15 N72-11385	NASA-CASE-MFS-18495
	US-PATENT-CLASS-416-121		US-PATENT-APPL-SN-38814
	US-PATENT-CLASS-416-127		US-PATENT-CLASS-24-211M
	US-PATENT-CLASS-416-130		US-PATENT-CLASS-85-5B
	US-PATENT-CLASS-416-149		US-PATENT-3,596,554
	US-PATENT-CLASS-416-200	c15 N72-11386	NASA-CASE-MFS-20249
	US-PATENT-3,592,559		US-PATENT-APPL-SN-794530
c03 N72-11062	NASA-CASE-XGS-04047-2		US-PATENT-CLASS-33-72
	US-PATENT-APPL-SN-843251		US-PATENT-CLASS-248-183
	US-PATENT-CLASS-136-206		US-PATENT-CLASS-248-278
	US-PATENT-3,597,281		US-PATENT-CLASS-248-487
c05 N72-11084	NASA-CASE-NPO-10677		US-PATENT-CLASS-350-285
	US-PATENT-APPL-SN-868530		US-PATENT-CLASS-350-287
	US-PATENT-CLASS-62-56	c15 N72-11387	US-PATENT-3,596,863
	US-PATENT-CLASS-62-467		NASA-CASE-MFP-09902
	US-PATENT-3,599,443		US-PATENT-APPL-SN-769665
c05 N72-11085	NASA-CASE-MSC-13140		US-PATENT-CLASS-75-20F
	US-PATENT-APPL-SN-796358		US-PATENT-3,592,628
	US-PATENT-CLASS-5-69	c15 N72-11388	NASA-CASE-MFS-20423
	US-PATENT-CLASS-285-410		US-PATENT-APPL-SN-865298
	US-PATENT-CLASS-297-68		US-PATENT-CLASS-212-134
	US-PATENT-CLASS-297-232		US-PATENT-CLASS-308-5
	US-PATENT-3,592,505		US-PATENT-3,600,046
c07 N72-11148	NASA-CASE-NPO-10301	c15 N72-11389	NASA-CASE-XLA-05056
	US-PATENT-APPL-SN-848810		US-PATENT-APPL-SN-596733
	US-PATENT-CLASS-343-771		US-PATENT-CLASS-210-445
	US-PATENT-CLASS-343-853		US-PATENT-3,592,768
	US-PATENT-3,599,216	c15 N72-11390	NASA-CASE-MFS-18100
c07 N72-11149	NASA-CASE-GSC-10390-1		US-PATENT-APPL-SN-784055
	US-PATENT-APPL-SN-749121		US-PATENT-CLASS-15-143
	US-PATENT-CLASS-325-4		US-PATENT-CLASS-15-210
	US-PATENT-CLASS-325-39		US-PATENT-3,591,885
	US-PATENT-CLASS-325-58	c15 N72-11391	NASA-CASE-NFO-11012
	US-PATENT-CLASS-343-5DP		US-PATENT-APPL-SN-845807
	US-PATENT-CLASS-343-7.5		US-PATENT-CLASS-248-18
	US-PATENT-CLASS-343-179		US-PATENT-CLASS-248-20
	US-PATENT-3,593,138		US-PATENT-3,592,422
c07 N72-11150	NASA-CASE-NPO-11064	c15 N72-11392	NASA-CASE-MFS-20299
	US-PATENT-APPL-SN-880248		US-PATENT-APPL-SN-889437
	US-PATENT-CLASS-331-7		US-PATENT-CLASS-156-66
	US-PATENT-CLASS-331-10		US-PATENT-CLASS-156-320
	US-PATENT-CLASS-331-34		US-PATENT-CLASS-219-221
	US-PATENT-CLASS-331-66		US-PATENT-CLASS-219-243
	US-PATENT-3,593,180		US-PATENT-3,593,001
c08 N72-11171	NASA-CASE-NPO-10769	c23 N72-11568	NASA-CASE-GSC-11133-1
	US-PATENT-APPL-SN-813494		US-PATENT-APPL-SN-121328
	US-PATENT-CLASS-179-15.55B	c24 N72-11595	NASA-CASE-MFS-20095
	US-PATENT-3,598,921		US-PATENT-APPL-SN-855004
c08 N72-11172	NASA-CASE-GSC-10880-1		US-PATENT-CLASS-250-49.5B

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-250-49.5TB	c14 N72-16283	NASA-CASE-GSC-10780-1
	US-PATENT-CLASS-250-51		US-PATENT-APPL-SN-860493
	US-PATENT-CLASS-250-52		US-PATENT-CLASS-82-24R
	US-PATENT-3,593,024		US-PATENT-3,608,409
c28 N72-11708	NASA-CASE-MFS-20619	c15 N72-16329	NASA-CASE-XLA-07829
	US-PATENT-APPL-SN-18982		US-PATENT-APPL-SN-763684
	US-PATENT-CLASS-60-271		US-PATENT-CLASS-264-DIG.44
	US-PATENT-CLASS-139-425R		US-PATENT-CLASS-264-221
	US-PATENT-CLASS-239-265.19		US-PATENT-CLASS-264-225
	US-PATENT-CLASS-239-265.43		US-PATENT-CLASS-264-227
	US-PATENT-3,596,465		US-PATENT-3,608,046
c28 N72-11709	NASA-CASE-NPO-10737	c15 N72-16330	NASA-CASE-LAR-10203-1
	US-PATENT-APPL-SN-760114		US-PATENT-APPL-SN-769592
	US-PATENT-CLASS-60-39-48		US-PATENT-CLASS-156-84
	US-PATENT-CLASS-60-202		US-PATENT-CLASS-156-86
	US-PATENT-3,591,967		US-PATENT-3,607,495
c07 N72-12080	NASA-CASE-GSC-10087-3	c06 N72-17093	NASA-CASE-LEW-10794-1
	US-PATENT-APPL-SN-880885		US-PATENT-APPL-SN-33535
	US-PATENT-CLASS-325-4		US-PATENT-CLASS-23-55
	US-PATENT-CLASS-343-6.5R		US-PATENT-CLASS-23-88
	US-PATENT-CLASS-343-6.8R		US-PATENT-CLASS-23-97
	US-PATENT-3,594,790		US-PATENT-3,607,015
c07 N72-12081	NASA-CASE-GSC-10185-1	c06 N72-17094	NASA-CASE-NPO-10234
	US-PATENT-APPL-SN-733039		US-PATENT-APPL-SN-800204
	US-PATENT-CLASS-178-DIG.12		US-PATENT-CLASS-23-230R
	US-PATENT-CLASS-178-6		US-PATENT-CLASS-23-232C
	US-PATENT-CLASS-178-7.3		US-PATENT-CLASS-23-253PC
	US-PATENT-CLASS-325-10		US-PATENT-CLASS-73-23.1
	US-PATENT-CLASS-325-13		US-PATENT-3,607,076
	US-PATENT-3,588,331	c06 N72-17095	NASA-CASE-NEO-10774
c09 N72-12136	NASA-CASE-XER-09521		US-PATENT-APPL-SN-848805
	US-PATENT-APPL-SN-771530		US-PATENT-CLASS-23-201
	US-PATENT-CLASS-136-202		US-PATENT-CLASS-23-230
	US-PATENT-CLASS-136-206		US-PATENT-CLASS-23-253
	US-PATENT-CLASS-136-227		US-PATENT-CLASS-73-76
	US-PATENT-CLASS-343-DIG.3		US-PATENT-3,607,080
	US-PATENT-CLASS-343-720	c07 N72-17109	NASA-CASE-MSC-12146-1
	US-PATENT-CLASS-343-840		US-PATENT-APPL-SN-50206
	US-PATENT-3,594,803		US-PATENT-CLASS-178-5.2R
c15 N72-12408	NASA-CASE-XLA-05966		US-PATENT-CLASS-178-5.4
	US-PATENT-APPL-SN-784544		US-PATENT-CLASS-178-6.7
	US-PATENT-CLASS-72-307		US-PATENT-3,603,722
	US-PATENT-CLASS-140-105	c09 N72-17152	NASA-CASE-ARC-10178-1
	US-PATENT-3,584,660		US-PATENT-APPL-SN-47443
c15 N72-12409	NASA-CASE-NPO-10637		US-PATENT-CLASS-250-211J
	US-PATENT-APPL-SN-851298		US-PATENT-3,603,798
	US-PATENT-CLASS-60-23	c09 N72-17153	NASA-CASE-ABC-10105
	US-PATENT-CLASS-236-68		US-PATENT-APPL-SN-887698
	US-PATENT-CLASS-337-75		US-PATENT-CLASS-128-2.1A
	US-PATENT-CLASS-337-354		US-PATENT-CLASS-307-252F
	US-PATENT-CLASS-337-359		US-PATENT-CLASS-307-252J
	US-PATENT-3,591,960		US-PATENT-CLASS-325-492
c16 N72-12440	NASA-CASE-MFS-20180		US-PATENT-CLASS-340-177
	US-PATENT-APPL-SN-863276		US-PATENT-3,603,946
	US-PATENT-CLASS-331-94.5	c09 N72-17154	NASA-CASE-ERC-10139
	US-PATENT-CLASS-350-1		US-PATENT-APPL-SN-889555
	US-PATENT-CLASS-350-312		US-PATENT-CLASS-321-10
	US-PATENT-3,593,194		US-PATENT-CLASS-336-178
c16 N72-13437	NASA-CASE-MFS-20125		US-PATENT-3,603,864
	US-PATENT-APPL-SN-830366	c09 N72-17155	NASA-CASE-NPO-11023
	US-PATENT-CLASS-178-DIG.21		US-PATENT-APPL-SN-865274
	US-PATENT-CLASS-178-6		US-PATENT-CLASS-330-18
	US-PATENT-CLASS-250-203X		US-PATENT-CLASS-330-40
	US-PATENT-CLASS-356-152		US-PATENT-3,603,892
	US-PATENT-3,603,686	c09 N72-17156	NASA-CASE-NEO-10199
c05 N72-15098	NASA-CASE-MSC-13917-1		US-PATENT-APPL-SN-739391
	US-PATENT-APPL-SN-198355		US-PATENT-CLASS-178-7.1
c03 N72-15986	NASA-CASE-XGS-10010		US-PATENT-CLASS-330-11
	US-PATENT-APPL-SN-729299		US-PATENT-CLASS-330-35
	US-PATENT-CLASS-136-6		US-PATENT-3,609,230
	US-PATENT-CLASS-136-133	c09 N72-17157	NASA-CASE-NEO-11253
	US-PATENT-CLASS-136-135		US-PATENT-APPL-SN-21906
	US-PATENT-3,607,401		US-PATENT-CLASS-307-81
c05 N72-16015	NASA-CASE-KSC-10278		US-PATENT-CLASS-307-223
	US-PATENT-APPL-SN-856327		US-PATENT-CLASS-307-227
	US-PATENT-CLASS-35-8		US-PATENT-CLASS-328-186
	US-PATENT-CLASS-324-66		US-PATENT-3,609,387
	US-PATENT-CLASS-340-279	c10 N72-17171	NASA-CASE-XAC-05462-2
	US-PATENT-3,609,740		US-PATENT-APPL-SN-28235
c10 N72-16172	NASA-CASE-ARC-10269-1		US-PATENT-CLASS-307-295
	US-PATENT-APPL-SN-56791		US-PATENT-CLASS-328-167
	US-PATENT-CLASS-307-230		US-PATENT-CLASS-330-109
	US-PATENT-CLASS-307-262		US-PATENT-CLASS-330-176
	US-PATENT-CLASS-328-155		US-PATENT-CLASS-333-70CR
	US-PATENT-3,614,475		US-PATENT-3,609,567
c14 N72-16282	NASA-CASE-LAR-10913	c10 N72-17172	NASA-CASE-ABC-10020
	US-PATENT-APPL-SN-779160		US-PATENT-APPL-SN-31885
	US-PATENT-CLASS-73-12		US-PATENT-CLASS-330-26
	US-PATENT-3,605,482		US-PATENT-CLASS-330-31

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-330-94		US-PATENT-APPL-SN-791267
	US-PATENT-CLASS-330-107		US-PATENT-CLASS-340-1741G
	US-PATENT-CLASS-330-109		US-PATENT-CLASS-340-174CT
	US-PATENT-3,605,032		US-PATENT-CLASS-340-174GA
c10 N72-17173	NASA-CASE-MFS-13130		US-PATENT-CLASS-340-174SC
	US-PATENT-APPL-SN-7868		US-PATENT-3,611,330
	US-PATENT-CLASS-250-83.30V	c26 N72-17820	NASA-CASE-IEB-08476-1
	US-PATENT-CLASS-250-209		US-PATENT-APPL-SN-8672388
	US-PATENT-CLASS-340-228.2		US-PATENT-CLASS-29-578
	US-PATENT-3,609,364		US-PATENT-CLASS-29-589
c11 N72-17183	NASA-CASE-MFS-20509		US-PATENT-CLASS-148-187
	US-PATENT-APPL-SN-889557		US-PATENT-3,602,984
	US-PATENT-CLASS-73-147	c28 N72-17843	NASA-CASE-NEO-10046
	US-PATENT-3,602,920		US-PATENT-APPL-SN-860635
c14 N72-17323	NASA-CASE-ERC-10248		US-PATENT-CLASS-60-39.74
	US-PATENT-APPL-SN-868445		US-PATENT-CLASS-60-258
	US-PATENT-CLASS-350-162		US-PATENT-3,603,092
	US-PATENT-CLASS-356-113	c30 N72-17873	NASA-CASE-AEC-10134
	US-PATENT-CLASS-356-209		US-PATENT-APPL-SN-819898
	US-PATENT-CLASS-356-244		US-PATENT-CLASS-244-3.21
	US-PATENT-3,603,690		US-PATENT-3,603,532
c14 N72-17324	NASA-CASE-MFS-20596	c33 N72-17947	NASA-CASE-HSC-12143-1
	US-PATENT-APPL-SN-7867		US-PATENT-APPL-SN-791268
	US-PATENT-CLASS-350-3.5		US-PATENT-CLASS-102-105
	US-PATENT-3,605,519		US-PATENT-CLASS-161-67
c14 N72-17325	NASA-CASE-HSC-15158-1		US-PATENT-CLASS-244-117
	US-PATENT-APPL-SN-889479		US-PATENT-3,603,260
	US-PATENT-CLASS-324-52	c33 N72-17948	NASA-CASE-NEO-10828
	US-PATENT-3,609,535		US-PATENT-APPL-SN-873260
c14 N72-17326	NASA-CASE-XMS-01994-1		US-PATENT-CLASS-165-105
	US-PATENT-APPL-SN-814212		US-PATENT-3,603,382
	US-PATENT-CLASS-356-4	c08 N72-18184	NASA-CASE-NEC-10629
	US-PATENT-3,603,683		US-PATENT-APPL-SN-860751
c14 N72-17327	NASA-CASE-LEW-10281-1		US-PATENT-CLASS-178-50
	US-PATENT-APPL-SN-861649		US-PATENT-CLASS-178-66
	US-PATENT-CLASS-73-198		US-PATENT-CLASS-179-15
	US-PATENT-3,605,495		US-PATENT-CLASS-235-154
c14 N72-17328	NASA-CASE-ILA-07813		US-PATENT-CLASS-340-347DD
	US-PATENT-APPL-SN-791364		US-PATENT-3,603,976
	US-PATENT-CLASS-250-41.9	c14 N72-18411	NASA-CASE-KSC-10294
	US-PATENT-CLASS-250-49.5		US-PATENT-APPL-SN-889556
	US-PATENT-CLASS-250-71.5		US-PATENT-CLASS-95-1.1
	US-PATENT-CLASS-250-83.3		US-PATENT-CLASS-307-311
	US-PATENT-CLASS-250-207		US-PATENT-CLASS-346-23
	US-PATENT-3,609,353		US-PATENT-CLASS-346-107A
c14 N72-17329	NASA-CASE-FRC-10012		US-PATENT-CLASS-352-84
	US-PATENT-APPL-SN-771216		US-PATENT-3,603,974
	US-PATENT-CLASS-73-194A	c15 N72-18477	NASA-CASE-GSC-10566-1
	US-PATENT-3,611,801		US-PATENT-APPL-SN-889438
c15 N72-17450	NASA-CASE-HSC-12279		US-PATENT-CLASS-52-108
	US-PATENT-APPL-SN-24154		US-PATENT-CLASS-242-54
	US-PATENT-CLASS-188-1C		US-PATENT-3,608,844
	US-PATENT-CLASS-188-129	c28 N72-18766	NASA-CASE-GSC-10640-1
	US-PATENT-3,603,433		US-PATENT-APPL-SN-17101
c15 N72-17451	NASA-CASE-WLP-10002		US-PATENT-CLASS-23-281
	US-PATENT-APPL-SN-47062		US-PATENT-CLASS-23-288
	US-PATENT-CLASS-180-125		US-PATENT-CLASS-60-260
	US-PATENT-CLASS-180-127		US-PATENT-3,603,093
	US-PATENT-CLASS-308-5	c15 N72-18477	NASA-CASE-GSC-10566-1
	US-PATENT-CLASS-308-9		US-PATENT-APPL-SN-889438
	US-PATENT-3,610,365		US-PATENT-CLASS-52-108
c15 N72-17452	NASA-CASE-ILA-10322		US-PATENT-CLASS-242-54
	US-PATENT-APPL-SN-887699		US-PATENT-3,608,844
	US-PATENT-CLASS-73-88.5B		NASA-CASE-GSC-10640-1
	US-PATENT-3,608,365		US-PATENT-APPL-SN-17101
c15 N72-17453	NASA-CASE-NPO-11177		US-PATENT-CLASS-23-281
	US-PATENT-APPL-SN-20960		US-PATENT-CLASS-23-288
	US-PATENT-CLASS-62-51		US-PATENT-CLASS-60-260
	US-PATENT-3,605,424		US-PATENT-3,603,093
c15 N72-17454	NASA-CASE-NPO-11059	c15 N72-18477	NASA-CASE-GSC-10566-1
	US-PATENT-APPL-SN-864020		US-PATENT-APPL-SN-889438
	US-PATENT-CLASS-248-14		US-PATENT-CLASS-52-108
	US-PATENT-3,606,979		US-PATENT-CLASS-242-54
c15 N72-17455	NASA-CASE-NPO-11140		US-PATENT-3,608,844
	US-PATENT-APPL-SN-15019		NASA-CASE-GSC-10640-1
	US-PATENT-CLASS-89-1.811		US-PATENT-APPL-SN-17101
	US-PATENT-CLASS-174-84		US-PATENT-CLASS-23-281
	US-PATENT-CLASS-200-64		US-PATENT-CLASS-23-288
	US-PATENT-CLASS-339-46		US-PATENT-CLASS-60-260
	US-PATENT-CLASS-339-176B		US-PATENT-3,603,093
	US-PATENT-CLASS-339-276B	c03 N72-20031	NASA-CASE-GSC-10669-1
	US-PATENT-3,611,274		US-PATENT-APPL-SN-90595
c18 N72-17532	NASA-CASE-MFS-13532		US-PATENT-CLASS-136-89
	US-PATENT-APPL-SN-720546		US-PATENT-CLASS-244-1SS
	US-PATENT-CLASS-106-292		US-PATENT-CLASS-340-210
	US-PATENT-CLASS-106-299		US-PATENT-3,636,539
	US-PATENT-3,607,338	c03 N72-20032	NASA-CASE-NEO-11021
c23 N72-17747	NASA-CASE-ERC-10089		US-PATENT-APPL-SN-880250
			US-PATENT-CLASS-136-79
			US-PATENT-CLASS-136-81
			US-PATENT-CLASS-136-166
			US-PATENT-3,625,766
		c03 N72-20033	NASA-CASE-NPO-10401
			US-PATENT-APPL-SN-15025
			US-PATENT-CLASS-210-212
			US-PATENT-CLASS-356-222
			US-PATENT-3,630,627
		c03 N72-20034	NASA-CASE-LEW-11359-2
			US-PATENT-APPL-SN-57399
			US-PATENT-CLASS-136-83B
			US-PATENT-CLASS-136-100B
			US-PATENT-CLASS-136-175
			US-PATENT-3,635,765
		c05 N72-20096	NASA-CASE-HSC-12411-1
			US-PATENT-APPL-SN-701244
			US-PATENT-CLASS-2-2.1
			US-PATENT-CLASS-128-142.5

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-128-402		US-PATENT-3,631,351
	US-PATENT-3,635,216	c10 N72-20225	NASA-CASE-MSC-13407-1
c05 N72-20097	NASA-CASE-MFS-20332		US-PATENT-APPL-SN-65840
	US-PATENT-APPL-SN-869260		US-PATENT-CLASS-315-22
	US-PATENT-CLASS-137-81		US-PATENT-CLASS-315-25
	US-PATENT-CLASS-137-469		US-PATENT-3,638,066
	US-PATENT-3,636,966	c11 N72-20244	NASA-CASE-NFO-11210
c05 N72-20098	NASA-CASE-MSC-12398		US-PATENT-APPL-SN-880831
	US-PATENT-APPL-SN-785615		US-PATENT-CLASS-123-102
	US-PATENT-CLASS-2-2.1		US-PATENT-CLASS-180-105E
	US-PATENT-3,624,839		US-PATENT-CLASS-318-308
c06 N72-20121	NASA-CASE-NPO-10765		US-PATENT-CLASS-318-327
	US-PATENT-APPL-SN-770425		US-PATENT-CLASS-318-376
	US-PATENT-CLASS-260-544F		US-PATENT-3,630,304
	US-PATENT-3,637,842	c14 N72-20379	NASA-CASE-GSC-10514-1
c07 N72-20140	NASA-CASE-NPO-10844		US-PATENT-APPL-SN-873045
	US-PATENT-APPL-SN-839934		US-PATENT-CLASS-250-208
	US-PATENT-CLASS-178-69.5R		US-PATENT-CLASS-356-138
	US-PATENT-CLASS-179-15BS		US-PATENT-CLASS-356-152
	US-PATENT-CLASS-325-4		US-PATENT-3,637,312
	US-PATENT-CLASS-325-38	c14 N72-20380	NASA-CASE-LAR-10176-1
	US-PATENT-CLASS-325-58		US-PATENT-APPL-SN-811038
	US-PATENT-CLASS-325-321		US-PATENT-CLASS-95-18
	US-PATENT-3,626,298		US-PATENT-3,626,828
c07 N72-20141	NASA-CASE-ERC-10179	c14 N72-20381	NASA-CASE-GSC-10503-1
	US-PATENT-APPL-SN-50207		US-PATENT-APPL-SN-789044
	US-PATENT-CLASS-325-445		US-PATENT-CLASS-250-83.6R
	US-PATENT-CLASS-329-161		US-PATENT-3,626,189
	US-PATENT-CLASS-329-162	c14 N72-20394	NASA-CASE-MSC-12448-1
	US-PATENT-CLASS-332-51W		US-PATENT-APPL-SN-212010
	US-PATENT-CLASS-333-73W	c15 N72-20442	NASA-CASE-GSC-10607-1
	US-PATENT-CLASS-343-772		US-PATENT-APPL-SN-27340
	US-PATENT-CLASS-343-773		US-PATENT-CLASS-251-129
	US-PATENT-CLASS-343-786		US-PATENT-CLASS-251-333
	US-PATENT-3,633,110		US-PATENT-3,632,081
c07 N72-20154	NASA-CASE-NPO-11243	c15 N72-20443	NASA-CASE-NFO-10671
	US-PATENT-APPL-SN-177753		US-PATENT-APPL-SN-657967
c08 N72-20176	NASA-CASE-NPO-11130		US-PATENT-CLASS-188-1E
	US-PATENT-APPL-SN-21508		US-PATENT-CLASS-186-268
	US-PATENT-CLASS-235-92CC		US-PATENT-3,637,051
	US-PATENT-CLASS-235-92DE	c15 N72-20444	NASA-CASE-FRC-10036
	US-PATENT-CLASS-235-92DM		US-PATENT-APPL-SN-889554
	US-PATENT-CLASS-235-92LG		US-PATENT-CLASS-29-412
	US-PATENT-CLASS-235-92R		US-PATENT-CLASS-29-426
	US-PATENT-CLASS-235-152		US-PATENT-CLASS-29-527.2
	US-PATENT-CLASS-340-347DA		US-PATENT-CLASS-29-624
	US-PATENT-CLASS-340-347DD		US-PATENT-CLASS-51-216
	US-PATENT-3,632,996		US-PATENT-CLASS-51-320
c08 N72-20177	NASA-CASE-NPO-10748		US-PATENT-CLASS-51-323
	US-PATENT-APPL-SN-63383		US-PATENT-3,636,623
	US-PATENT-CLASS-324-77G	c15 N72-20445	NASA-CASE-NFO-10704
	US-PATENT-3,631,339		US-PATENT-APPL-SN-59895
c09 N72-20199	NASA-CASE-NPO-10722		US-PATENT-CLASS-138-178
	US-PATENT-APPL-SN-860492		US-PATENT-CLASS-285-18
	US-PATENT-CLASS-200-81.9M		US-PATENT-CLASS-285-345
	US-PATENT-CLASS-335-205		US-PATENT-3,632,140
	US-PATENT-3,632,923	c15 N72-20446	NASA-CASE-MFS-20698
c09 N72-20200	NASA-CASE-NPO-10694		US-PATENT-APPL-SN-3418
	US-PATENT-APPL-SN-24224		US-PATENT-CLASS-23-209.1
	US-PATENT-CLASS-339-275T		US-PATENT-CLASS-100-299
	US-PATENT-CLASS-339-276T		US-PATENT-CLASS-264-22
	US-PATENT-3,631,382		US-PATENT-CLASS-425-77
c10 N72-20221	NASA-CASE-GSC-10082-1		US-PATENT-3,632,242
	US-PATENT-APPL-SN-41430	c22 N72-20597	NASA-CASE-IXE-04599
	US-PATENT-CLASS-307-273		US-PATENT-APPL-SN-751215
	US-PATENT-CLASS-307-288		US-PATENT-CLASS-176-86G
	US-PATENT-CLASS-307-313		US-PATENT-3,629,068
	US-PATENT-CLASS-328-207	c28 N72-20758	NASA-CASE-XNP-03282
	US-PATENT-CLASS-330-30D		US-PATENT-APPL-SN-745337
	US-PATENT-3,633,048		US-PATENT-CLASS-60-254
c10 N72-20222	NASA-CASE-XLA-11189		US-PATENT-3,636,711
	US-PATENT-APPL-SN-889375	c31 N72-20840	NASA-CASE-MFS-20922
	US-PATENT-CLASS-324-115		US-PATENT-APPL-SN-220274
	US-PATENT-CLASS-324-132		NASA-CASE-NFO-10831
	US-PATENT-3,638,114	c33 N72-20915	US-PATENT-APPL-SN-10161
c10 N72-20223	NASA-CASE-NPO-11133		US-PATENT-CLASS-122-32
	US-PATENT-APPL-SN-887685		US-PATENT-CLASS-165-133
	US-PATENT-CLASS-307-295		US-PATENT-CLASS-165-155
	US-PATENT-CLASS-328-16		US-PATENT-CLASS-165-158
	US-PATENT-CLASS-328-20		US-PATENT-CLASS-165-161
	US-PATENT-CLASS-328-38		US-PATENT-CLASS-165-174
	US-PATENT-CLASS-328-166		US-PATENT-3,630,276
	US-PATENT-3,626,308	c06 N72-21094	NASA-CASE-BEC-10108
c10 N72-20224	NASA-CASE-NPO-11203		US-PATENT-APPL-SN-833049
	US-PATENT-APPL-SN-3696		US-PATENT-CLASS-96-36.2
	US-PATENT-CLASS-324-83A		US-PATENT-CLASS-156-3
	US-PATENT-CLASS-324-85		US-PATENT-3,615,465
	US-PATENT-CLASS-328-133	c06 N72-21105	NASA-CASE-GSC-11304-1
	US-PATENT-CLASS-343-12		

ACCESSION NUMBER INDEX

c07 N72-21117	US-PATENT-APPL-SN-137912 NASA-CASE-XLA-11154 US-PATENT-APPL-SN-23532 US-PATENT-CLASS-343-706 US-PATENT-CLASS-343-912 US-PATENT-3,623,107	c14 N72-21408	US-PATENT-APPL-SN-873793 US-PATENT-CLASS-73-147 US-PATENT-3,623,361 NASA-CASE-HSC-13332-1 US-PATENT-APPL-SN-77169 US-PATENT-CLASS-250-43.5B US-PATENT-CLASS-250-83.3B
c07 N72-21118	NASA-CASE-NPO-11001 US-PATENT-APPL-SN-856279 US-PATENT-CLASS-343-5CH US-PATENT-CLASS-343-6.5R US-PATENT-CLASS-343-100ST US-PATENT-3,624,650	c14 N72-21409	US-PATENT-3,614,431 NASA-CASE-HSC-12105-1 US-PATENT-APPL-SN-763743 US-PATENT-CLASS-356-17 US-PATENT-CLASS-356-18 US-PATENT-3,614,228
c07 N72-21119	NASA-CASE-EBC-10112 US-PATENT-APPL-SN-796690 US-PATENT-CLASS-179-100.2K US-PATENT-3,614,343	c14 N72-21432	NASA-CASE-LAE-10766-1 US-PATENT-APPL-SN-188836
c08 N72-21197	NASA-CASE-KSC-10326 US-PATENT-APPL-SN-25487 US-PATENT-CLASS-235-155 US-PATENT-CLASS-340-347DD US-PATENT-3,638,002	c14 N72-21433	NASA-CASE-ARC-10344-1 US-PATENT-APPL-SN-180962
c08 N72-21198	NASA-CASE-EBC-10307 US-PATENT-APPL-SN-39755 US-PATENT-CLASS-307-299 US-PATENT-CLASS-307-303 US-PATENT-CLASS-307-311 US-PATENT-CLASS-340-173.2 US-PATENT-CLASS-340-173LS US-PATENT-3,623,030	c15 N72-21462	NASA-CASE-NFO-10679 US-PATENT-APPL-SN-848282 US-PATENT-CLASS-74-89.15 US-PATENT-3,614,898
c08 N72-21199	NASA-CASE-NPO-10743 US-PATENT-APPL-SN-850587 US-PATENT-CLASS-340-174CS US-PATENT-CLASS-340-174LC US-PATENT-CLASS-340-174M US-PATENT-CLASS-340-174SR US-PATENT-3,613,110	c15 N72-21463	NASA-CASE-HFS-20413 US-PATENT-APPL-SN-69209 US-PATENT-CLASS-74-469 US-PATENT-3,620,095
c08 N72-21200	NASA-CASE-NPO-11018 US-PATENT-APPL-SN-873259 US-PATENT-CLASS-340-347AD US-PATENT-3,613,111	c15 N72-21464	NASA-CASE-ARC-10176-1 US-PATENT-APPL-SN-889583 US-PATENT-CLASS-324-57R US-PATENT-CLASS-324-64 US-PATENT-CLASS-324-71E US-PATENT-3,624,496
c09 N72-21243	NASA-CASE-LBW-11005-1 US-PATENT-APPL-SN-86548 US-PATENT-CLASS-323-DIG.1 US-PATENT-CLASS-323-22T US-PATENT-CLASS-323-38 US-PATENT-3,638,103	c15 N72-21465	NASA-CASE-GSC-10218-1 US-PATENT-APPL-SN-15022 US-PATENT-CLASS-23-253R US-PATENT-CLASS-23-259 US-PATENT-CLASS-73-425.6 US-PATENT-CLASS-141-2J US-PATENT-CLASS-195-127 US-PATENT-CLASS-222-71 US-PATENT-CLASS-222-1J5 US-PATENT-CLASS-222-309 US-PATENT-3,615,241
c09 N72-21244	NASA-CASE-LAB-10545-1 US-PATENT-APPL-SN-31703 US-PATENT-CLASS-343-771 US-PATENT-CLASS-343-893 US-PATENT-3,638,224	c15 N72-21466	NASA-CASE-NFO-10440 US-PATENT-APPL-SN-756834 US-PATENT-CLASS-204-59 US-PATENT-CLASS-204-130 US-PATENT-3,616,338
c09 N72-21245	NASA-CASE-ARC-10192 US-PATENT-APPL-SN-15024 US-PATENT-CLASS-307-230 US-PATENT-CLASS-307-295 US-PATENT-CLASS-328-142 US-PATENT-CLASS-328-167 US-PATENT-CLASS-330-70R US-PATENT-CLASS-330-85 US-PATENT-CLASS-333-80 US-PATENT-3,621,407	c15 N72-21489	NASA-CASE-XLA-10470 US-PATENT-APPL-SN-219436
c09 N72-21246	NASA-CASE-NPO-11134 US-PATENT-APPL-SN-883524 US-PATENT-CLASS-318-576 US-PATENT-CLASS-324-71R US-PATENT-CLASS-346-1 US-PATENT-CLASS-346-29 US-PATENT-3,624,659	c21 N72-21624	NASA-CASE-HQN-10439 US-PATENT-APPL-SN-889551 US-PATENT-CLASS-244-1SA US-PATENT-3,637,170
c09 N72-21247	NASA-CASE-KSC-10393 US-PATENT-APPL-SN-71047 US-PATENT-CLASS-307-257 US-PATENT-CLASS-307-259 US-PATENT-CLASS-331-14 US-PATENT-CLASS-331-23 US-PATENT-CLASS-331-30 US-PATENT-CLASS-331-111 US-PATENT-3,614,648	c21 N72-21631	NASA-CASE-EBC-10419 US-PATENT-APPL-SN-219722
c09 N72-21248	NASA-CASE-LAB-10503-1 US-PATENT-APPL-SN-229143	c26 N72-21701	NASA-CASE-EBC-10119 US-PATENT-APPL-SN-825258 US-PATENT-CLASS-307-299 US-PATENT-CLASS-317-234V US-PATENT-CLASS-317-235R US-PATENT-CLASS-331-107 US-PATENT-CLASS-332-11 US-PATENT-3,614,557
c12 N72-21310	NASA-CASE-HFS-20829 US-PATENT-APPL-SN-61894 US-PATENT-CLASS-169-28 US-PATENT-CLASS-169-36 US-PATENT-3,613,794	c03 N72-22041	NASA-CASE-NPO-10591 US-PATENT-APPL-SN-776185 US-PATENT-CLASS-29-572 US-PATENT-3,616,528
c14 N72-21405	NASA-CASE-NPO-10832 US-PATENT-APPL-SN-22265 US-PATENT-CLASS-73-141A US-PATENT-3,623,360	c03 N72-22042	NASA-CASE-NFC-10747 US-PATENT-APPL-SN-6616 US-PATENT-CLASS-136-89 US-PATENT-3,615,853
c14 N72-21407	NASA-CASE-HFS-20642	c05 N72-22092	NASA-CASE-ARC-10275-1 US-PATENT-APPL-SN-21644 US-PATENT-CLASS-2-2.1A US-PATENT-3,636,564
		c05 N72-22093	NASA-CASE-HSC-12324-1 US-PATENT-APPL-SN-63384 US-PATENT-CLASS-4-99 US-PATENT-CLASS-4-110 US-PATENT-CLASS-128-295 US-PATENT-3,602,923
		c06 N72-22107	NASA-CASE-NPO-10862 US-PATENT-APPL-SN-810815 US-PATENT-CLASS-260-877 US-PATENT-3,639,510
		c07 N72-22127	NASA-CASE-NPO-10303 US-PATENT-APPL-SN-848776 US-PATENT-CLASS-343-771 US-PATENT-CLASS-343-797

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-343-853		US-PATENT-CLASS-307-304
	US-PATENT-CLASS-343-912		US-PATENT-CLASS-307-317
	US-PATENT-3,623,114		US-PATENT-CLASS-328-106
c08 N72-22162	NASA-CASE-NPO-11333	c09 N72-22202	US-PATENT-3,621,287
	US-PATENT-APPL-SN-78065		NASA-CASE-ARC-10136-1
	US-PATENT-CLASS-178-52		US-PATENT-APPL-SN-865106
	US-PATENT-CLASS-179-18A		US-PATENT-CLASS-128-2.1A
	US-PATENT-CLASS-179-158L		US-PATENT-CLASS-128-2B
	US-PATENT-CLASS-307-243		US-PATENT-CLASS-307-231
	US-PATENT-CLASS-307-251		US-PATENT-CLASS-307-247
	US-PATENT-CLASS-328-104		US-PATENT-CLASS-307-288
	US-PATENT-CLASS-328-154		US-PATENT-CLASS-325-29
	US-PATENT-3,614,327		US-PATENT-CLASS-325-492
c08 N72-22163	NASA-CASE-MSC-13110-1		US-PATENT-CLASS-340-171
	US-PATENT-APPL-SN-23132		US-PATENT-CLASS-340-203
	US-PATENT-CLASS-340-347AD		US-PATENT-3,621,290
	US-PATENT-3,614,772	c09 N72-22203	NASA-CASE-12R-11046
c08 N72-22164	NASA-CASE-NPO-10745		US-PATENT-APPL-SN-810579
	US-PATENT-APPL-SN-878730		US-PATENT-CLASS-321-2
	US-PATENT-CLASS-178-DIG.28		US-PATENT-CLASS-321-15
	US-PATENT-CLASS-178-DIG.36		US-PATENT-CLASS-321-18
	US-PATENT-CLASS-178-6.8		US-PATENT-CLASS-321-45
	US-PATENT-CLASS-178-7.2B		US-PATENT-CLASS-331-117
	US-PATENT-3,621,130		US-PATENT-3,621,362
c08 N72-22165	NASA-CASE-NPO-11104	c09 N72-22204	NASA-CASE-LAB-10137-1
	US-PATENT-APPL-SN-860750		US-PATENT-APPL-SN-881041
	US-PATENT-CLASS-235-150.52		US-PATENT-CLASS-200-81B
	US-PATENT-CLASS-235-150.53		US-PATENT-CLASS-200-82C
	US-PATENT-CLASS-235-183		US-PATENT-3,609,271
	US-PATENT-CLASS-235-194	c10 N72-22235	NASA-CASE-GSC-10064-1
	US-PATENT-CLASS-235-197		US-PATENT-APPL-SN-802812
	US-PATENT-CLASS-340-347R		US-PATENT-CLASS-343-7.4
	US-PATENT-3,621,228		US-PATENT-CLASS-343-16H
c08 N72-22166	NASA-CASE-NPO-10560		US-PATENT-CLASS-343-779
	US-PATENT-APPL-SN-856282		US-PATENT-CLASS-343-786
	US-PATENT-CLASS-235-153		US-PATENT-3,623,094
	US-PATENT-CLASS-324-73AT	c10 N72-22236	NASA-CASE-GSC-10878-1
	US-PATENT-CLASS-340-347AD		US-PATENT-APPL-SN-889423
	US-PATENT-3,603,772		US-PATENT-CLASS-307-206
c08 N72-22167	NASA-CASE-NPO-11082		US-PATENT-CLASS-307-215
	US-PATENT-APPL-SN-868529		US-PATENT-CLASS-307-322
	US-PATENT-CLASS-235-152		US-PATENT-CLASS-307-323
	US-PATENT-CLASS-340-146.1		US-PATENT-3,621,277
	US-PATENT-CLASS-340-348	c11 N72-22245	NASA-CASE-NPO-12109
	US-PATENT-3,609,327		US-PATENT-APPL-SN-690172
c09 N72-22195	NASA-CASE-MFS-14710		US-PATENT-CLASS-230-54
	US-PATENT-APPL-SN-852843		US-PATENT-CLASS-230-221
	US-PATENT-CLASS-74-105		US-PATENT-3,612,391
	US-PATENT-3,614,899	c11 N72-22246	NASA-CASE-ILA-07430
c09 N72-22196	NASA-CASE-ERC-10075-2		US-PATENT-APPL-SN-867841
	US-PATENT-APPL-SN-775870		US-PATENT-CLASS-73-147
	US-PATENT-CLASS-321-2		US-PATENT-3,620,076
	US-PATENT-CLASS-321-14	c11 N72-22247	NASA-CASE-NPO-11013
	US-PATENT-CLASS-321-19		US-PATENT-APPL-SN-858695
	US-PATENT-CLASS-321-25		US-PATENT-CLASS-42-1F
	US-PATENT-CLASS-323-56		US-PATENT-3,619,924
	US-PATENT-CLASS-323-89C	c14 N72-22437	NASA-CASE-LAB-10496-1
	US-PATENT-3,614,587		US-PATENT-APPL-SN-12661
c09 N72-22197	NASA-CASE-LEW-10433-1		US-PATENT-CLASS-73-141A
	US-PATENT-APPL-SN-849106		US-PATENT-3,611,798
	US-PATENT-CLASS-307-88MP	c14 N72-22438	NASA-CASE-ARC-10263-1
	US-PATENT-CLASS-307-262		US-PATENT-APPL-SN-882122
	US-PATENT-3,612,895		US-PATENT-CLASS-73-398C
c09 N72-22198	NASA-CASE-MFS-13687-2		US-PATENT-3,620,083
	US-PATENT-APPL-SN-80369	c14 N72-22439	NASA-CASE-MFS-20890
	US-PATENT-CLASS-174-36		US-PATENT-APPL-SN-103229
	US-PATENT-CLASS-174-106B		US-PATENT-CLASS-29-421
	US-PATENT-CLASS-174-117F		US-PATENT-CLASS-264-22
	US-PATENT-3,612,743		US-PATENT-CLASS-310-11
c09 N72-22199	NASA-CASE-ERC-10222		US-PATENT-CLASS-310-42
	US-PATENT-APPL-SN-832603		US-PATENT-3,626,218
	US-PATENT-CLASS-29-590	c14 N72-22440	NASA-CASE-ARC-10154-1
	US-PATENT-3,621,565		US-PATENT-APPL-SN-793771
c09 N72-22200	NASA-CASE-FRC-10036		US-PATENT-CLASS-73-67.2
	US-PATENT-APPL-SN-872602		US-PATENT-3,620,069
	US-PATENT-CLASS-73-88.5	c14 N72-22441	NASA-CASE-NPO-11002
	US-PATENT-CLASS-307-237		US-PATENT-APPL-SN-856328
	US-PATENT-CLASS-307-254		US-PATENT-CLASS-350-19
	US-PATENT-CLASS-307-317		US-PATENT-CLASS-350-23
	US-PATENT-CLASS-328-1		US-PATENT-CLASS-350-26
	US-PATENT-CLASS-328-151		US-PATENT-CLASS-350-35
	US-PATENT-3,621,285		US-PATENT-CLASS-350-36
c09 N72-22201	NASA-CASE-LEW-10387		US-PATENT-CLASS-350-49
	US-PATENT-APPL-SN-76899		US-PATENT-CLASS-350-52
	US-PATENT-CLASS-307-223B		US-PATENT-3,612,645
	US-PATENT-CLASS-307-241	c14 N72-22442	NASA-CASE-MFS-21629
	US-PATENT-CLASS-307-252J		US-PATENT-APPL-SN-612265
	US-PATENT-CLASS-307-252K		US-PATENT-CLASS-73-304
	US-PATENT-CLASS-307-284		US-PATENT-CLASS-324-61

ACCESSION NUMBER INDEX

c14 N72-22443 US-PATENT-3,639,835
NASA-CASE-XGS-03736
US-PATENT-APPL-SN-749320
US-PATENT-CLASS-96-90PC
US-PATENT-CLASS-252-300
US-PATENT-3,639,250
c14 N72-22444 NASA-CASE-LAR-10523-1
US-PATENT-APPL-SN-32665
US-PATENT-CLASS-250-203
US-PATENT-CLASS-350-16
US-PATENT-CLASS-350-52
US-PATENT-CLASS-356-248
US-PATENT-3,647,276
c14 N72-22445 NASA-CASE-LAR-10184
US-PATENT-APPL-SN-16808
US-PATENT-CLASS-33-174S
US-PATENT-CLASS-350-86
US-PATENT-3,620,595
c15 N72-22482 NASA-CASE-XLA-04897
US-PATENT-APPL-SN-880249
US-PATENT-CLASS-73-133
US-PATENT-3,613,457
c15 N72-22483 NASA-CASE-XNP-09770-2
US-PATENT-APPL-SN-864039
US-PATENT-CLASS-209-349
US-PATENT-3,615,021
c15 N72-22484 NASA-CASE-LAR-10031
US-PATENT-APPL-SN-867851
US-PATENT-CLASS-62-55.5
US-PATENT-3,625,018
c15 N72-22485 NASA-CASE-MSC-13512-1
US-PATENT-APPL-SN-73932
US-PATENT-CLASS-74-501R
US-PATENT-3,625,084
c15 N72-22486 NASA-CASE-KSC-10031
US-PATENT-APPL-SN-98773
US-PATENT-CLASS-220-5R
US-PATENT-CLASS-317-101DH
US-PATENT-CLASS-317-117
US-PATENT-CLASS-317-120
US-PATENT-3,639,809
c15 N72-22487 NASA-CASE-GSC-10303
US-PATENT-APPL-SN-802813
US-PATENT-CLASS-29-473.1
US-PATENT-3,619,896
c15 N72-22488 NASA-CASE-MSC-11849-1
US-PATENT-APPL-SN-6617
US-PATENT-CLASS-85-1
US-PATENT-3,623,394
c15 N72-22489 NASA-CASE-GSC-10518-1
US-PATENT-APPL-SN-789045
US-PATENT-CLASS-55-446
US-PATENT-CLASS-55-464
US-PATENT-CLASS-417-152
US-PATENT-3,623,828
c15 N72-22490 NASA-CASE-LBW-10856-1
US-PATENT-APPL-SN-3417
US-PATENT-CLASS-308-195
US-PATENT-3,620,585
c15 N72-22491 NASA-CASE-GSC-10913
US-PATENT-APPL-SN-889558
US-PATENT-CLASS-29-628
US-PATENT-CLASS-219-85
US-PATENT-CLASS-219-158
US-PATENT-CLASS-219-234
US-PATENT-CLASS-228-57
US-PATENT-3,621,194
c15 N72-22492 NASA-CASE-MFS-20482
US-PATENT-APPL-SN-6610
US-PATENT-CLASS-29-472.9
US-PATENT-CLASS-29-473.1
US-PATENT-3,602,979
c16 N72-22520 NASA-CASE-LAR-10815-1
US-PATENT-APPL-SN-233587
c17 N72-22530 NASA-CASE-XLB-06461
US-PATENT-APPL-SN-853855
US-PATENT-CLASS-75-.5B
US-PATENT-3,623,861
c17 N72-22535 NASA-CASE-LBW-10874-1
US-PATENT-APPL-SN-68024
US-PATENT-CLASS-75-170
US-PATENT-CLASS-148-32.5
US-PATENT-3,620,718
c18 N72-22566 NASA-CASE-MFS-20011
US-PATENT-APPL-SN-813338
US-PATENT-CLASS-106-84
US-PATENT-CLASS-106-286
US-PATENT-CLASS-106-288B
US-PATENT-3,620,791

c18 N72-22567 NASA-CASE-NPO-11091
US-PATENT-APPL-SN-860781
US-PATENT-CLASS-260-2.1E
US-PATENT-3,629,161
c21 N72-22619 NASA-CASE-ARC-10179-1
US-PATENT-APPL-SN-835058
US-PATENT-CLASS-244-114
US-PATENT-CLASS-340-26
US-PATENT-3,624,598
c23 N72-22673 NASA-CASE-XER-07896-2
US-PATENT-APPL-SN-36819
US-PATENT-CLASS-350-310
US-PATENT-3,620,606
c28 N72-22769 NASA-CASE-ARC-10106-1
US-PATENT-APPL-SN-812998
US-PATENT-CLASS-244-3.22
US-PATENT-3,612,442
c28 N72-22770 NASA-CASE-LBW-10770-1
US-PATENT-APPL-SN-880246
US-PATENT-CLASS-60-202
US-PATENT-3,613,370
c28 N72-22771 NASA-CASE-LBW-10835-1
US-PATENT-APPL-SN-67815
US-PATENT-CLASS-60-202
US-PATENT-3,620,018
c28 N72-22772 NASA-CASE-NFO-12072
US-PATENT-APPL-SN-82647
US-PATENT-CLASS-123-122AB
US-PATENT-CLASS-137-81.5
US-PATENT-CLASS-261-145
US-PATENT-3,640,256
c31 N72-22874 NASA-CASE-NFO-10883
US-PATENT-APPL-SN-26573
US-PATENT-CLASS-136-89
US-PATENT-CLASS-312-257
US-PATENT-3,620,846
c03 N72-23048 NASA-CASE-NFO-11388
US-PATENT-APPL-SN-119282
US-PATENT-CLASS-310-2
US-PATENT-CLASS-321-2
US-PATENT-CLASS-322-2
US-PATENT-3,648,152
c05 N72-23085 NASA-CASE-LAR-10102-1
US-PATENT-APPL-SN-13266
US-PATENT-CLASS-224-25A
US-PATENT-3,649,921
c09 N72-23171 NASA-CASE-GSC-10221-1
US-PATENT-APPL-SN-779025
US-PATENT-CLASS-307-252N
US-PATENT-CLASS-307-252R
US-PATENT-CLASS-307-259
US-PATENT-CLASS-307-305
US-PATENT-3,621,294
c09 N72-23172 NASA-CASE-LAR-10320-1
US-PATENT-APPL-SN-18427
US-PATENT-CLASS-324-20R
US-PATENT-3,649,907
c09 N72-23173 NASA-CASE-EBC-10267
US-PATENT-APPL-SN-41348
US-PATENT-CLASS-235-197
US-PATENT-CLASS-307-229
US-PATENT-CLASS-328-145
US-PATENT-3,648,043
c11 N72-23215 NASA-CASE-MFS-20710
US-PATENT-APPL-SN-114848
US-PATENT-CLASS-13-20
US-PATENT-CLASS-13-31
US-PATENT-3,647,924
c14 N72-23457 NASA-CASE-MSC-12297
US-PATENT-APPL-SN-792623
US-PATENT-CLASS-55-493
US-PATENT-CLASS-55-498
US-PATENT-CLASS-55-502
US-PATENT-CLASS-55-521
US-PATENT-3,650,095
c15 N72-23497 NASA-CASE-KSC-10242
US-PATENT-APPL-SN-73834
US-PATENT-CLASS-219-85
US-PATENT-CLASS-219-109
US-PATENT-CLASS-219-234
US-PATENT-CLASS-324-65B
US-PATENT-3,621,193
c18 N72-23581 NASA-CASE-GSC-10361-1
US-PATENT-APPL-SN-700040
US-PATENT-CLASS-106-84
US-PATENT-3,620,784
c23 N72-23695 NASA-CASE-BQM-10541-3
US-PATENT-APPL-SN-822089
US-PATENT-CLASS-350-171

ACCESSION NUMBER INDEX

c28 N72-23809	US-PATENT-3,606,522 NASA-CASE-XNP-09461 US-PATENT-APPL-SN-670829 US-PATENT-CLASS-239-418 US-PATENT-CLASS-239-433 US-PATENT-CLASS-239-543 US-PATENT-3,650,474	c06 N72-25148	US-PATENT-3,663,464 NASA-CASE-NPS-13994-2 US-PATENT-APPL-SN-870689 US-PATENT-CLASS-260-348SC US-PATENT-3,660,434
c28 N72-23810	NASA-CASE-NPO-11458 US-PATENT-APPL-SN-36926 US-PATENT-CLASS-60-266 US-PATENT-CLASS-60-271 US-PATENT-3,648,461	c06 N72-25149	NASA-CASE-GSC-10565-1 US-PATENT-APPL-SN-822039 US-PATENT-CLASS-195-28R US-PATENT-CLASS-195-103.5R US-PATENT-CLASS-260-211.5 US-PATENT-3,660,240
c03 N72-24C37	NASA-CASE-GSC-11514-1 US-PATENT-APPL-SN-820453 US-PATENT-CLASS-117-201 US-PATENT-CLASS-136-89 US-PATENT-3,653,970	c06 N72-25150	NASA-CASE-XLE-06774-2 US-PATENT-APPL-SN-5114 US-PATENT-CLASS-117-132 US-PATENT-CLASS-117-161 US-PATENT-CLASS-260-2.5 US-PATENT-CLASS-260-92.1 US-PATENT-3,666,741
c14 N72-24477	NASA-CASE-ARC-10138-1 US-PATENT-APPL-SN-774733 US-PATENT-CLASS-73-355R US-PATENT-CLASS-250-83.3H US-PATENT-CLASS-317-247 US-PATENT-CLASS-324-61R US-PATENT-3,657,644	c06 N72-25151	NASA-CASE-NFS-20979 US-PATENT-APPL-SN-100774 US-PATENT-CLASS-260-18S US-PATENT-CLASS-260-46.5P US-PATENT-CLASS-260-46.5G US-PATENT-CLASS-260-46.5P US-PATENT-CLASS-260-448.2C US-PATENT-3,666,718
c15 N72-24522	NASA-CASE-NPO-11036 US-PATENT-APPL-SN-41346 US-PATENT-CLASS-264-92 US-PATENT-3,658,974	c06 N72-25152	NASA-CASE-NPO-10863-2 US-PATENT-APPL-SN-145026 US-PATENT-CLASS-260-92.1 US-PATENT-3,663,521
c25 N72-24753	NASA-CASE-XNP-04167-2 US-PATENT-APPL-SN-866442 US-PATENT-CLASS-313-186 US-PATENT-CLASS-313-212 US-PATENT-CLASS-313-224 US-PATENT-CLASS-313-231 US-PATENT-CLASS-315-111 US-PATENT-CLASS-315-326 US-PATENT-CLASS-315-358 US-PATENT-CLASS-331-94.5 US-PATENT-3,617,804	c07 N72-25170	NASA-CASE-LAE-10513-1 US-PATENT-APPL-SN-64723 US-PATENT-CLASS-333-7 US-PATENT-CLASS-333-81R US-PATENT-CLASS-333-98P US-PATENT-CLASS-333-98R US-PATENT-CLASS-333-98S US-PATENT-3,649,935
c03 N72-25019	NASA-CASE-NPO-10575 US-PATENT-APPL-SN-6615 US-PATENT-CLASS-156-250 US-PATENT-CLASS-156-510 US-PATENT-3,654,036	c07 N72-25171	NASA-CASE-NFS-21042 US-PATENT-APPL-SN-86417 US-PATENT-CLASS-102-34.4 US-PATENT-CLASS-325-4 US-PATENT-CLASS-325-114 US-PATENT-CLASS-343-6.5R US-PATENT-3,667,044
c03 N72-25020	NASA-CASE-GSC-11211-1 US-PATENT-APPL-SN-139528 US-PATENT-CLASS-235-92T US-PATENT-CLASS-307-141.8 US-PATENT-CLASS-320-48 US-PATENT-CLASS-324-29.5 US-PATENT-3,663,938	c07 N72-25172	NASA-CASE-NFO-11358 US-PATENT-APPL-SN-116786 US-PATENT-CLASS-179-15BV US-PATENT-CLASS-340-172.5 US-PATENT-3,665,417
c03 N72-25021	NASA-CASE-NPO-11118 US-PATENT-APPL-SN-8650 US-PATENT-CLASS-214-90R US-PATENT-3,666,120	c07 N72-25173	NASA-CASE-ERC-10324 US-PATENT-APPL-SN-54270 US-PATENT-CLASS-178-69.5 US-PATENT-CLASS-325-38 US-PATENT-CLASS-325-51 US-PATENT-CLASS-325-55 US-PATENT-CLASS-325-58 US-PATENT-CLASS-325-64 US-PATENT-CLASS-325-141 US-PATENT-CLASS-325-302 US-PATENT-CLASS-325-325 US-PATENT-CLASS-340-167 US-PATENT-3,665,313
c05 N72-25119	NASA-CASE-HSC-12397-1 US-PATENT-APPL-SN-785613 US-PATENT-CLASS-2-2.1 US-PATENT-CLASS-2-115 US-PATENT-3,660,851	c07 N72-25174	NASA-CASE-NFO-11264 US-PATENT-APPL-SN-36531 US-PATENT-CLASS-343-762 US-PATENT-CLASS-343-777 US-PATENT-CLASS-343-779 US-PATENT-CLASS-343-786 US-PATENT-CLASS-343-853 US-PATENT-3,665,481
c05 N72-25120	NASA-CASE-HSC-90153-2 US-PATENT-APPL-SN-844225 US-PATENT-CLASS-106-209 US-PATENT-CLASS-128-2.1 US-PATENT-CLASS-128-417 US-PATENT-CLASS-252-514 US-PATENT-CLASS-264-104 US-PATENT-3,665,064	c08 N72-25206	NASA-CASE-KSC-10397 US-PATENT-APPL-SN-25488 US-PATENT-CLASS-235-154 US-PATENT-CLASS-340-347DA US-PATENT-3,648,275
c05 N72-25121	NASA-CASE-FBC-10029-2 US-PATENT-APPL-SN-78704 US-PATENT-CLASS-29-25.14 US-PATENT-CLASS-29-25.18 US-PATENT-CLASS-29-482 US-PATENT-CLASS-29-630A US-PATENT-CLASS-156-264 US-PATENT-CLASS-156-308 US-PATENT-3,662,441	c08 N72-25207	NASA-CASE-NFO-11161 US-PATENT-APPL-SN-889374 US-PATENT-CLASS-340-146.1 US-PATENT-CLASS-340-172.5 US-PATENT-3,648,256
c05 N72-25122	NASA-CASE-HSC-13609-1 US-PATENT-APPL-SN-94347 US-PATENT-CLASS-128-2R US-PATENT-3,662,744	c08 N72-25208	NASA-CASE-NFO-11338 US-PATENT-APPL-SN-89412 US-PATENT-CLASS-178-50 US-PATENT-CLASS-179-15BC US-PATENT-CLASS-179-15FD US-PATENT-CLASS-325-62 US-PATENT-CLASS-332-21 US-PATENT-3,659,053
c06 N72-25146	NASA-CASE-NPO-11322 US-PATENT-APPL-SN-87550 US-PATENT-CLASS-73-23.1 US-PATENT-CLASS-250-43.5R US-PATENT-3,666,942		
c06 N72-25147	NASA-CASE-ARC-10325 US-PATENT-APPL-SN-63610 US-PATENT-CLASS-260-2.5FP		

ACCESSION NUMBER INDEX

c08 N72-25209	NASA-CASE-NPO-11194 US-PATENT-APPL-SN-63532 US-PATENT-CLASS-343-6.5R US-PATENT-CLASS-343-12R US-PATENT-CLASS-343-14 US-PATENT-3,659,292	US-PATENT-APPL-SN-889422 US-PATENT-CLASS-29-198 US-PATENT-CLASS-117-200 US-PATENT-CLASS-136-89 US-PATENT-3,664,874
c08 N72-25210	NASA-CASE-NPO-10636 US-PATENT-APPL-SN-77221 US-PATENT-CLASS-235-152 US-PATENT-CLASS-340-146.1AL US-PATENT-3,662,337	c09 N72-25260 NASA-CASE-NPO-11283 US-PATENT-APPL-SN-118270 US-PATENT-CLASS-310-4 US-PATENT-3,663,839
c09 N72-25247	NASA-CASE-LAR-10163-1 US-PATENT-APPL-SN-73310 US-PATENT-CLASS-343-708 US-PATENT-CLASS-343-771 US-PATENT-CLASS-343-873 US-PATENT-3,653,052	c09 N72-25261 NASA-CASE-NPO-10224 US-PATENT-APPL-SN-868775 US-PATENT-CLASS-29-492 US-PATENT-CLASS-29-497 US-PATENT-CLASS-29-498 US-PATENT-CLASS-29-502 US-PATENT-CLASS-29-589 US-PATENT-CLASS-29-628 US-PATENT-3,665,589
c09 N72-25248	NASA-CASE-NPO-11342 US-PATENT-APPL-SN-89209 US-PATENT-CLASS-340-172.5 US-PATENT-CLASS-340-324A US-PATENT-3,648,250	c09 N72-25262 NASA-CASE-NPO-11078 US-PATENT-APPL-SN-82280 US-PATENT-CLASS-307-83 US-PATENT-CLASS-307-103 US-PATENT-CLASS-323-48 US-PATENT-CLASS-323-82 US-PATENT-3,663,828
c09 N72-25249	NASA-CASE-GSC-10656-1 US-PATENT-APPL-SN-59969 US-PATENT-CLASS-321-2 US-PATENT-CLASS-323-DIG.1 US-PATENT-CLASS-323-17 US-PATENT-CLASS-323-22T US-PATENT-3,621,372	c11 N72-25284 NASA-CASE-LAR-10507-1 US-PATENT-APPL-SN-874177 US-PATENT-CLASS-195-127 US-PATENT-3,649,462
c09 N72-25250	NASA-CASE-RSC-10565 US-PATENT-APPL-SN-98517 US-PATENT-CLASS-315-135 US-PATENT-CLASS-315-349 US-PATENT-CLASS-330-2 US-PATENT-CLASS-330-59 US-PATENT-CLASS-340-332 US-PATENT-3,659,148	c11 N72-25287 NASA-CASE-LAR-10546-1 US-PATENT-APPL-SN-32664 US-PATENT-CLASS-52-648 US-PATENT-CLASS-52-655 US-PATENT-CLASS-287-54A US-PATENT-3,665,670
c09 N72-25251	NASA-CASE-ERC-10048 US-PATENT-APPL-SN-10329 US-PATENT-CLASS-307-261 US-PATENT-CLASS-321-2 US-PATENT-CLASS-321-18 US-PATENT-3,659,184	c11 N72-25288 NASA-CASE-NFS-20434 US-PATENT-APPL-SN-55534 US-PATENT-CLASS-73-140 US-PATENT-CLASS-73-161 US-PATENT-3,665,758
c09 N72-25252	NASA-CASE-ERC-10268 US-PATENT-APPL-SN-39342 US-PATENT-CLASS-321-2 US-PATENT-CLASS-321-11 US-PATENT-CLASS-321-18 US-PATENT-CLASS-321-19 US-PATENT-CLASS-321-45BR US-PATENT-CLASS-321-45R US-PATENT-3,663,940	c12 N72-25292 NASA-CASE-NPO-11556 US-PATENT-APPL-SN-82648 US-PATENT-CLASS-210-188 US-PATENT-CLASS-310-11 US-PATENT-3,648,083
c09 N72-25253	NASA-CASE-GSC-11126-1 US-PATENT-APPL-SN-98640 US-PATENT-CLASS-321-2 US-PATENT-CLASS-321-47 US-PATENT-CLASS-331-113A US-PATENT-3,663,941	c13 N72-25323 NASA-CASE-NPO-11373 US-PATENT-APPL-SN-81095 US-PATENT-CLASS-73-421.5R US-PATENT-CLASS-73-4226C US-PATENT-CLASS-73-4227C US-PATENT-3,662,604
c09 N72-25254	NASA-CASE-NPO-10760 US-PATENT-APPL-SN-129071 US-PATENT-CLASS-321-2 US-PATENT-CLASS-321-45R US-PATENT-CLASS-331-113A US-PATENT-3,663,944	c14 N72-25409 NASA-CASE-ERC-10174 US-PATENT-APPL-SN-39344 US-PATENT-CLASS-250-83.30V US-PATENT-CLASS-250-209 US-PATENT-CLASS-250-226 US-PATENT-CLASS-350-203 US-PATENT-3,657,549
c09 N72-25255	NASA-CASE-LAR-10620-1 US-PATENT-APPL-SN-125979 US-PATENT-CLASS-310-10 US-PATENT-CLASS-310-15 US-PATENT-3,663,843	c14 N72-25410 NASA-CASE-ERC-10292 US-PATENT-APPL-SN-45519 US-PATENT-CLASS-73-515 US-PATENT-CLASS-73-521 US-PATENT-CLASS-350-160B US-PATENT-3,657,928
c09 N72-25256	NASA-CASE-XLA-02609 US-PATENT-APPL-SN-41347 US-PATENT-CLASS-333-79 US-PATENT-CLASS-339-143R US-PATENT-CLASS-339-147R US-PATENT-3,663,929	c14 N72-25411 NASA-CASE-NSC-15626-1 US-PATENT-APPL-SN-94374 US-PATENT-CLASS-73-12 US-PATENT-CLASS-73-492 US-PATENT-CLASS-116-1144B US-PATENT-3,656,352
c09 N72-25257	NASA-CASE-NSC-12395 US-PATENT-APPL-SN-138573 US-PATENT-CLASS-307-233 US-PATENT-CLASS-324-78D US-PATENT-CLASS-324-186 US-PATENT-CLASS-328-136 US-PATENT-CLASS-328-140 US-PATENT-3,663,885	c14 N72-25412 NASA-CASE-NFS-15063 US-PATENT-APPL-SN-51477 US-PATENT-CLASS-178-DIG.8 US-PATENT-CLASS-178-6.8 US-PATENT-CLASS-340-227B US-PATENT-3,659,043
c09 N72-25258	NASA-CASE-LAR-10253-1 US-PATENT-APPL-SN-99175 US-PATENT-CLASS-307-88.3 US-PATENT-CLASS-330-8.5 US-PATENT-3,663,886	c14 N72-25413 NASA-CASE-GSC-10879-1 US-PATENT-APPL-SN-889420 US-PATENT-CLASS-195-127 US-PATENT-3,666,631
c09 N72-25259	NASA-CASE-GSC-10695-1	c14 N72-25414 NASA-CASE-NPO-11311 US-PATENT-APPL-SN-57252 US-PATENT-CLASS-178-7.92 US-PATENT-CLASS-350-175FS US-PATENT-3,663,753
		c14 N72-25428 NASA-CASE-HQN-10756-1 US-PATENT-APPL-SN-236052 US-PATENT-CLASS-10489-1 US-PATENT-APPL-SN-889682

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-29-599		US-PATENT-3,663,347
	US-PATENT-CLASS-117-62	c18 N72-25541	NASA-CASE-REC-10363
	US-PATENT-CLASS-117-93.16D		US-PATENT-APPL-SN-57253
	US-PATENT-CLASS-117-107		US-PATENT-CLASS-52-DIG.10
	US-PATENT-CLASS-117-211		US-PATENT-CLASS-52-80
	US-PATENT-CLASS-117-217		US-PATENT-CLASS-161-7
	US-PATENT-3,649,356		US-PATENT-CLASS-161-68
c15 N72-25448	NASA-CASE-LEW-10450-1		US-PATENT-CLASS-161-127
	US-PATENT-APPL-SN-880271		US-PATENT-3,663,346
	US-PATENT-CLASS-75-0.5BB	c21 N72-25595	NASA-CASE-MSC-13397-1
	US-PATENT-CLASS-75-206		US-PATENT-APPL-SN-59966
	US-PATENT-CLASS-75-213		US-PATENT-CLASS-244-1SA
	US-PATENT-3,649,242		US-PATENT-CLASS-244-2JA
c15 N72-25450	NASA-CASE-NPO-11202		US-PATENT-3,662,973
	US-PATENT-APPL-SN-66004	c23 N72-25619	NASA-CASE-NPO-10634
	US-PATENT-CLASS-285-DIG. 21		US-PATENT-APPL-SN-112999
	US-PATENT-CLASS-285-3		US-PATENT-CLASS-62-6
	US-PATENT-CLASS-285-33		US-PATENT-CLASS-62-80
	US-PATENT-CLASS-285-316		US-PATENT-CLASS-62-85
	US-PATENT-CLASS-339-45H		US-PATENT-CLASS-62-475
	US-PATENT-CLASS-339-91B		US-PATENT-3,656,313
	US-PATENT-3,656,781	c26 N72-25679	NASA-CASE-XER-07895
c15 N72-25451	NASA-CASE-NPO-10606		US-PATENT-APPL-SN-651627
	US-PATENT-APPL-SN-8636		US-PATENT-CLASS-317-234J
	US-PATENT-CLASS-251-360		US-PATENT-CLASS-317-235A
	US-PATENT-3,658,295		US-PATENT-CLASS-317-235AJ
c15 N72-25452	NASA-CASE-LEW-10965-1		US-PATENT-CLASS-317-235B
	US-PATENT-APPL-SN-876588		US-PATENT-CLASS-331-107G
	US-PATENT-CLASS-96-36.2		US-PATENT-3,667,010
	US-PATENT-CLASS-117-16R	c26 N72-25680	NASA-CASE-ERC-10275
	US-PATENT-CLASS-117-37		US-PATENT-APPL-SN-47061
	US-PATENT-CLASS-117-47B		US-PATENT-CLASS-324-92
	US-PATENT-CLASS-117-62		US-PATENT-CLASS-324-96
	US-PATENT-CLASS-117-93.3		US-PATENT-CLASS-340-324R
	US-PATENT-CLASS-117-124C		US-PATENT-CLASS-350-150
	US-PATENT-CLASS-117-152		US-PATENT-CLASS-350-160R
	US-PATENT-CLASS-204-49		US-PATENT-3,667,039
	US-PATENT-CLASS-204-157.18AG	c27 N72-25699	NASA-CASE-NPO-12000
	US-PATENT-CLASS-250-65P		US-PATENT-APPL-SN-74861
	US-PATENT-3,658,569		US-PATENT-CLASS-149-19
c15 N72-25453	NASA-CASE-KSC-10513		US-PATENT-CLASS-149-20
	US-PATENT-APPL-SN-61535		US-PATENT-CLASS-149-36
	US-PATENT-CLASS-187-1		US-PATENT-CLASS-149-92
	US-PATENT-CLASS-187-20		US-PATENT-3,658,608
	US-PATENT-CLASS-187-95	c31 N72-25842	NASA-CASE-MSC-12372-1
	US-PATENT-CLASS-254-190		US-PATENT-APPL-SN-64391
	US-PATENT-3,666,051		US-PATENT-CLASS-95-12.5
c15 N72-25454	NASA-CASE-MSC-12233-1		US-PATENT-3,662,661
	US-PATENT-APPL-SN-73422	c32 N72-25877	NASA-CASE-LAR-10270-1
	US-PATENT-CLASS-52-169		US-PATENT-APPL-SN-60881
	US-PATENT-CLASS-52-173		US-PATENT-CLASS-73-15.6
	US-PATENT-CLASS-52-594		US-PATENT-CLASS-73-100
	US-PATENT-3,665,669		US-PATENT-3,665,751
c15 N72-25455	NASA-CASE-NPO-11095	c33 N72-25911	NASA-CASE-LEW-10359
	US-PATENT-APPL-SN-19585		US-PATENT-APPL-SN-47063
	US-PATENT-CLASS-60-39.74A		US-PATENT-CLASS-60-200A
	US-PATENT-CLASS-60-258		US-PATENT-CLASS-60-265
	US-PATENT-CLASS-239-42A		US-PATENT-CLASS-60-267
	US-PATENT-3,662,547		US-PATENT-CLASS-62-467
c15 N72-25456	NASA-CASE-NPO-11222		US-PATENT-CLASS-102-105
	US-PATENT-APPL-SN-59893		US-PATENT-3,656,317
	US-PATENT-CLASS-310-68	c33 N72-25913	NASA-CASE-XMS-09690
	US-PATENT-CLASS-310-80		US-PATENT-APPL-SN-853641
	US-PATENT-CLASS-310-83		US-PATENT-CLASS-73-15R
	US-PATENT-3,660,704		US-PATENT-3,665,750
c15 N72-25457	NASA-CASE-ERC-10325	c03 N72-26031	NASA-CASE-REC-10753
	US-PATENT-APPL-SN-43884		US-PATENT-APPL-SN-844355
	US-PATENT-CLASS-324-158D		US-PATENT-CLASS-136-202
	US-PATENT-CLASS-324-158T		US-PATENT-3,666,566
	US-PATENT-3,665,307	c15 N72-26371	NASA-CASE-NPO-10244
c16 N72-25485	NASA-CASE-ERC-10283		US-PATENT-APPL-SN-43327
	US-PATENT-APPL-SN-39185		US-PATENT-CLASS-73-136R
	US-PATENT-CLASS-331-94.5		US-PATENT-CLASS-308-2A
	US-PATENT-CLASS-332-7.51		US-PATENT-3,664,185
	US-PATENT-3,659,225	c03 N72-27053	NASA-CASE-GSC-10344-1
c18 N72-25539	NASA-CASE-LEW-10424-2-2		US-PATENT-APPL-SN-785078
	US-PATENT-APPL-SN-15222		US-PATENT-CLASS-136-89
	US-PATENT-CLASS-75-DIG. 1		US-PATENT-3,672,999
	US-PATENT-CLASS-75-208	c05 N72-27102	NASA-CASE-LAR-10365-1
	US-PATENT-CLASS-75-211		US-PATENT-APPL-SN-3151
	US-PATENT-CLASS-75-226		US-PATENT-CLASS-210-103
	US-PATENT-3,653,882		US-PATENT-CLASS-210-104
c18 N72-25540	NASA-CASE-ERC-10364		US-PATENT-CLASS-210-110
	US-PATENT-APPL-SN-55537		US-PATENT-CLASS-210-137
	US-PATENT-CLASS-52-DIG. 10		US-PATENT-3,670,890
	US-PATENT-CLASS-52-80	c05 N72-27103	NASA-CASE-MSC-13648
	US-PATENT-CLASS-161-7		US-PATENT-APPL-SN-87222
	US-PATENT-CLASS-161-68		US-PATENT-CLASS-128-DIG. 4
	US-PATENT-CLASS-161-127		US-PATENT-CLASS-128-2.1E

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-128-417		US-PATENT-CLASS-350-138
	US-PATENT-3,669,110		US-PATENT-3,670,097
c06 N72-27144	NASA-CASE-NPO-10768-2	c26 N72-27784	NASA-CASE-LAR-10836-1
	US-PATENT-APPL-SN-99524		US-PATENT-APPL-SN-138227
	US-PATENT-APPL-SN-770398		US-PATENT-CLASS-350-161
	US-PATENT-CLASS-260-77.5AP		US-PATENT-3,671,105
	US-PATENT-CLASS-260-535H	c33 N72-27959	NASA-CASE-LAR-10800-1
	US-PATENT-3,671,497		US-PATENT-APPL-SN-154094
c06 N72-27151	NASA-CASE-NPO-10767-2		US-PATENT-CLASS-73-35
	US-PATENT-APPL-SN-241061		US-PATENT-3,670,559
c09 N72-27226	NASA-CASE-LRW-10330-1	c03 N72-28025	NASA-CASE-NFC-10633
	US-PATENT-APPL-SN-110402		US-PATENT-APPL-SN-885521
	US-PATENT-CLASS-336-60		US-PATENT-CLASS-62-93
	US-PATENT-CLASS-336-198		US-PATENT-CLASS-165-3
	US-PATENT-CLASS-336-220		US-PATENT-CLASS-165-20
	US-PATENT-3,648,209		US-PATENT-3,675,712
c09 N72-27227	NASA-CASE-KSC-10644	c09 N72-28225	NASA-CASE-NIS-20757
	US-PATENT-APPL-SN-114849		US-PATENT-APPL-SN-136006
	US-PATENT-CLASS-307-92		US-PATENT-CLASS-339-75HP
	US-PATENT-CLASS-307-118		US-PATENT-CLASS-339-94M
	US-PATENT-CLASS-340-240		US-PATENT-CLASS-339-176MP
	US-PATENT-3,673,424		US-PATENT-CLASS-339-218M
c09 N72-27228	NASA-CASE-NPO-10542		US-PATENT-3,670,290
	US-PATENT-APPL-SN-767741	c10 N72-28240	NASA-CASE-ARC-10265-1
	US-PATENT-CLASS-310-4		US-PATENT-APPL-SN-64709
	US-PATENT-3,673,440		US-PATENT-CLASS-324-41
c10 N72-27246	NASA-CASE-ERC-10015-2		US-PATENT-CLASS-340-258
	US-PATENT-APPL-SN-97343		US-PATENT-3,676,772
	US-PATENT-APPL-SN-763744	c10 N72-28241	NASA-CASE-GSC-10786-1
	US-PATENT-CLASS-313-309		US-PATENT-APPL-SN-773072
	US-PATENT-CLASS-313-336		US-PATENT-CLASS-330-29
	US-PATENT-CLASS-313-351		US-PATENT-3,533,006
	US-PATENT-CLASS-315-36	c14 N72-28436	NASA-CASE-XLA-06683
	US-PATENT-3,671,798		US-PATENT-APPL-SN-10827
c11 N72-27262	NASA-CASE-MFS-20620		US-PATENT-CLASS-33-15A
	US-PATENT-APPL-SN-154935		US-PATENT-CLASS-33-75B
	US-PATENT-CLASS-73-117.1		US-PATENT-3,675,332
	US-PATENT-CLASS-73-432SD	c14 N72-28437	NASA-CASE-BEC-10081
	US-PATENT-3,670,564		US-PATENT-APPL-SN-877990
c14 N72-27400	NASA-CASE-NPO-11147		US-PATENT-CLASS-73-355
	US-PATENT-APPL-SN-63195		US-PATENT-CLASS-325-363
	US-PATENT-CLASS-324-79R		US-PATENT-CLASS-343-100MB
	US-PATENT-CLASS-328-189		US-PATENT-CLASS-343-112D
	US-PATENT-CLASS-331-44		US-PATENT-3,665,467
	US-PATENT-3,670,241	c14 N72-28438	NASA-CASE-XLA-04980-2
c14 N72-27409	NASA-CASE-NPO-11201		US-PATENT-APPL-SN-577548
	US-PATENT-APPL-SN-77220		US-PATENT-APPL-SN-763040
	US-PATENT-CLASS-250-203R		US-PATENT-CLASS-148-187
	US-PATENT-CLASS-250-225		US-PATENT-3,549,435
	US-PATENT-CLASS-350-147	c15 N72-28495	NASA-CASE-MFS-14405
	US-PATENT-CLASS-356-141		US-PATENT-APPL-SN-73283
	US-PATENT-CLASS-356-152		US-PATENT-CLASS-74-469
	US-PATENT-3,670,168		US-PATENT-CLASS-214-1CM
c14 N72-27410	NASA-CASE-XLE-05230		US-PATENT-3,631,737
	US-PATENT-APPL-SN-877717	c15 N72-28496	NASA-CASE-MFS-20433
	US-PATENT-CLASS-136-233		US-PATENT-APPL-SN-114847
	US-PATENT-3,671,329		US-PATENT-CLASS-52-1
c14 N72-27411	NASA-CASE-MSC-12293-1		US-PATENT-CLASS-52-573
	US-PATENT-APPL-SN-59956		US-PATENT-3,675,376
	US-PATENT-CLASS-250-205	c16 N72-28521	NASA-CASE-NFC-11437
	US-PATENT-CLASS-315-151		US-PATENT-APPL-SN-63144
	US-PATENT-CLASS-315-156		US-PATENT-CLASS-330-4
	US-PATENT-CLASS-315-158		US-PATENT-CLASS-331-94
	US-PATENT-CLASS-315-297		US-PATENT-3,676,787
	US-PATENT-CLASS-315-307	c17 N72-28535	NASA-CASE-XLE-06461-2
	US-PATENT-CLASS-315-310		US-PATENT-APPL-SN-156778
	US-PATENT-CLASS-315-311		US-PATENT-APPL-SN-853855
	US-PATENT-3,670,202		US-PATENT-CLASS-266-24
c14 N72-27412	NASA-CASE-MFS-20523		US-PATENT-3,675,910
	US-PATENT-APPL-SN-77786	c17 N72-28536	NASA-CASE-XLE-03940-2
	US-PATENT-CLASS-73-71.6		US-PATENT-APPL-SN-539255
	US-PATENT-CLASS-73-103		US-PATENT-APPL-SN-793657
	US-PATENT-3,670,563		US-PATENT-CLASS-29-182.5
c15 N72-27484	NASA-CASE-NPO-10721		US-PATENT-3,676,084
	US-PATENT-APPL-SN-59968	c24 N72-28714	NASA-CASE-LRW-10518-2
	US-PATENT-CLASS-248-188.4		US-PATENT-APPL-SN-266927
	US-PATENT-3,669,393	c26 N72-28761	NASA-CASE-NFO-11775
c15 N72-27485	NASA-CASE-XLA-09843		US-PATENT-APPL-SN-162230
	US-PATENT-APPL-SN-60876		US-PATENT-CLASS-29-570
	US-PATENT-CLASS-83-8		US-PATENT-CLASS-317-230
	US-PATENT-CLASS-83-522		US-PATENT-CLASS-317-261
	US-PATENT-CLASS-83-562		US-PATENT-3,676,754
	US-PATENT-CLASS-83-563	c26 N72-28762	NASA-CASE-LAR-10294-1
	US-PATENT-CLASS-83-588		US-PATENT-APPL-SN-796685
	US-PATENT-3,668,956		US-PATENT-CLASS-29-25.42
c23 N72-27728	NASA-CASE-ABC-10160-1		US-PATENT-CLASS-106-39
	US-PATENT-APPL-SN-867842		US-PATENT-CLASS-106-46
	US-PATENT-CLASS-178-DIG.20		US-PATENT-CLASS-117-212
	US-PATENT-CLASS-178-6.5		US-PATENT-CLASS-117-217

ACCESSION NUMBER INDEX

c09 N72-29172	US-PATENT-3,649,353 NASA-CASE-LAR-10511-1 US-PATENT-APPL-SN-41345 US-PATENT-CLASS-333-248 US-PATENT-CLASS-333-98P US-PATENT-CLASS-333-98R US-PATENT-3,676,809	c25 N72-32688	US-PATENT-CLASS-219-273 US-PATENT-3,690,291 NASA-CASE-NFS-20589 US-PATENT-APPL-SN-103077 US-PATENT-CLASS-313-231 US-PATENT-CLASS-315-111 US-PATENT-3,693,002
c14 N72-29464	NASA-CASE-ARC-10017-1 US-PATENT-APPL-SN-55536 US-PATENT-CLASS-250-41.9D US-PATENT-CLASS-250-71.5R US-PATENT-CLASS-313-356 US-PATENT-3,676,674	c04 N72-33072	NASA-CASE-ERC-10338 US-PATENT-APPL-SN-50339 US-PATENT-CLASS-23-109 US-PATENT-3,679,360
c15 N72-29488	NASA-CASE-XLE-10326-2 US-PATENT-APPL-SN-54540 US-PATENT-APPL-SN-723465 US-PATENT-CLASS-277-25 US-PATENT-CLASS-277-27 US-PATENT-CLASS-277-74 US-PATENT-3,675,935	c05 N72-33096	NASA-CASE-HSC-13540-1 US-PATENT-APPL-SN-68023 US-PATENT-CLASS-99-80PS US-PATENT-3,692,533
c06 N72-31140	NASA-CASE-HSC-13335-1 US-PATENT-APPL-SN-55806 US-PATENT-CLASS-55-16 US-PATENT-CLASS-55-55 US-PATENT-3,678,654	c07 N72-33146	NASA-CASE-HSC-12259-2 US-PATENT-APPL-SN-61895 US-PATENT-APPL-SN-853763 US-PATENT-CLASS-325-373 US-PATENT-3,694,753
c06 N72-31141	NASA-CASE-ARC-10308-1 US-PATENT-APPL-SN-134568 US-PATENT-CLASS-250-43.5R US-PATENT-CLASS-356-51 US-PATENT-3,679,899	c08 N72-33172	NASA-CASE-WFO-11630 US-PATENT-APPL-SN-143078 US-PATENT-CLASS-179-15.55B US-PATENT-3,694,581
c08 N72-31226	NASA-CASE-WFO-11016 US-PATENT-APPL-SN-889584 US-PATENT-CLASS-235-92MT US-PATENT-CLASS-235-150.1 US-PATENT-CLASS-235-151.1 US-PATENT-CLASS-323-19 US-PATENT-CLASS-340-347AD US-PATENT-3,681,581	c09 N72-33204	NASA-CASE-WFO-11129 US-PATENT-APPL-SN-883523 US-PATENT-CLASS-307-262 US-PATENT-CLASS-307-295 US-PATENT-CLASS-328-24 US-PATENT-CLASS-328-155 US-PATENT-3,621,406
c09 N72-31235	NASA-CASE-ERC-10214 US-PATENT-APPL-SN-863914 US-PATENT-CLASS-343-770 US-PATENT-CLASS-343-771 US-PATENT-CLASS-343-786 US-PATENT-CLASS-343-797 US-PATENT-CLASS-343-853 US-PATENT-3,680,142	c09 N72-33205	NASA-CASE-GSC-10835-1 US-PATENT-APPL-SN-116778 US-PATENT-CLASS-317-101A US-PATENT-CLASS-317-235 US-PATENT-CLASS-317-235A US-PATENT-CLASS-317-235AJ US-PATENT-3,694,700
c10 N72-31273	NASA-CASE-KSC-10647-1 US-PATENT-APPL-SN-774691 US-PATENT-CLASS-178-7.5E US-PATENT-CLASS-315-22R US-PATENT-CLASS-315-30R US-PATENT-CLASS-330-27R US-PATENT-3,678,191	c10 N72-33230	NASA-CASE-GSC-11340-1 US-PATENT-APPL-SN-107379 US-PATENT-CLASS-330-12 US-PATENT-CLASS-331-115 US-PATENT-CLASS-331-116R US-PATENT-CLASS-333-80T US-PATENT-3,693,105
c14 N72-31446	NASA-CASE-ERC-10087-2 US-PATENT-APPL-SN-91642 US-PATENT-APPL-SN-738315 US-PATENT-CLASS-29-588 US-PATENT-CLASS-317-234D US-PATENT-CLASS-317-234G US-PATENT-CLASS-317-235H US-PATENT-CLASS-317-235R US-PATENT-3,686,542	c14 N72-33377	NASA-CASE-HFS-20760 US-PATENT-APPL-SN-99174 US-PATENT-CLASS-73-85 US-PATENT-CLASS-73-141AB US-PATENT-3,693,418
c15 N72-31483	NASA-CASE-LAR-10061-1 US-PATENT-APPL-SN-104047 US-PATENT-CLASS-251-86 US-PATENT-CLASS-251-331 US-PATENT-3,680,830	c15 N72-33476	NASA-CASE-IGS-07805 US-PATENT-APPL-SN-104884 US-PATENT-CLASS-308-10 US-PATENT-3,694,041
c21 N72-31637	NASA-CASE-GSC-10945-1 US-PATENT-APPL-SN-75431 US-PATENT-CLASS-60-23 US-PATENT-CLASS-60-26 US-PATENT-3,678,685	c15 N72-33477	NASA-CASE-NEC-11380 US-PATENT-APPL-SN-147997 US-PATENT-CLASS-60-1 US-PATENT-CLASS-60-36 US-PATENT-CLASS-137-13 US-PATENT-CLASS-137-81.5 US-PATENT-3,693,346
c07 N72-32169	NASA-CASE-WFO-11361 US-PATENT-APPL-SN-112988 US-PATENT-CLASS-343-781 US-PATENT-CLASS-343-837 US-PATENT-CLASS-343-840 US-PATENT-CLASS-343-915 US-PATENT-3,680,144	c24 N72-33681	NASA-CASE-LBW-10518-1 US-PATENT-APPL-SN-863280 US-PATENT-CLASS-176-11 US-PATENT-3,694,313
c14 N72-32452	NASA-CASE-NFS-15162 US-PATENT-APPL-SN-100639 US-PATENT-CLASS-350-79 US-PATENT-CLASS-356-241 US-PATENT-3,694,094	c25 N72-33696	NASA-CASE-GSC-11291-1 US-PATENT-APPL-SN-102412 US-PATENT-CLASS-250-83.6R US-PATENT-3,694,655
c15 N72-32487	NASA-CASE-LAR-10541-1 US-PATENT-APPL-SN-138229 US-PATENT-CLASS-118-49.1 US-PATENT-CLASS-204-298 US-PATENT-CLASS-219-121P	c08 N73-12175	NASA-CASE-NEC-11406 US-PATENT-APPL-SN-95183 US-PATENT-CLASS-235-152 US-PATENT-CLASS-331-76 US-PATENT-CLASS-340-146.1AL US-PATENT-3,700,869
		c08 N73-12176	NASA-CASE-KSC-10595 US-PATENT-APPL-SN-98772 US-PATENT-CLASS-235-155 US-PATENT-CLASS-340-347DD US-PATENT-J,697,733
		c08 N73-12177	NASA-CASE-NEC-11371 US-PATENT-APPL-SN-117575 US-PATENT-CLASS-340-146.1AQ US-PATENT-CLASS-340-146.1AV US-PATENT-3,697,950
		c09 N73-12211	NASA-CASE-ERC-10412-1 US-PATENT-APPL-SN-72024 US-PATENT-CLASS-343-5DP US-PATENT-CLASS-343-11R

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-343-11VB				US-PATENT-3,698,667
	US-PATENT-3,696,418		c02 N73-13023		NASA-CASE-LAR-10531-1
c09 N73-12214	NASA-CASE-NPO-13091-1				US-PATENT-APPL-SN-304720
	US-PATENT-APPL-SN-290022		c05 N73-13114		NASA-CASE-MSC-13604-1
c09 N73-12216	NASA-CASE-LAR-11084-1				US-PATENT-APPL-SN-78717
	US-PATENT-APPL-SN-308362				US-PATENT-CLASS-35-22B
c10 N73-12244	NASA-CASE-NPO-11631				US-PATENT-CLASS-124-2B
	US-PATENT-APPL-SN-123253				US-PATENT-CLASS-273-1B
	US-PATENT-CLASS-179-1P				US-PATENT-3,698,385
	US-PATENT-CLASS-325-473		c06 N73-13128		NASA-CASE-GSC-11214-1
	US-PATENT-CLASS-325-480				US-PATENT-APPL-SN-115134
	US-PATENT-3,700,812				US-PATENT-CLASS-117-35B
c11 N73-12264	NASA-CASE-LAR-10348-1				US-PATENT-3,702,775
	US-PATENT-APPL-SN-70032		c06 N73-13129		NASA-CASE-XNP-08124-2
	US-PATENT-CLASS-73-147				US-PATENT-APPL-SN-97829
	US-PATENT-3,695,101				US-PATENT-CLASS-75-66
c11 N73-12265	NASA-CASE-NPO-10890				US-PATENT-3,702,762
	US-PATENT-APPL-SN-99903		c07 N73-13149		NASA-CASE-NPO-11302-1
	US-PATENT-CLASS-52-171				US-PATENT-APPL-SN-70967
	US-PATENT-CLASS-137-559				US-PATENT-CLASS-178-69.5
	US-PATENT-CLASS-219-203				US-PATENT-CLASS-235-150.53
	US-PATENT-CLASS-219-522				US-PATENT-CLASS-235-181
	US-PATENT-3,696,833				US-PATENT-CLASS-325-325
c14 N73-12444	NASA-CASE-GSC-10903-1				US-PATENT-CLASS-340-146.1
	US-PATENT-APPL-SN-114846				US-PATENT-3,701,894
	US-PATENT-CLASS-73-421.5		c08 N73-13187		NASA-CASE-GSC-10975-1
	US-PATENT-CLASS-250-41.9G				US-PATENT-APPL-SN-100996
	US-PATENT-CLASS-250-41.9S				US-PATENT-CLASS-340-172.5
	US-PATENT-3,700,893				US-PATENT-3,702,463
c14 N73-12445	NASA-CASE-LAR-10728-1		c09 N73-13208		NASA-CASE-LEW-11192-1
	US-PATENT-APPL-SN-112998				US-PATENT-APPL-SN-198285
	US-PATENT-CLASS-250-83.3B				US-PATENT-CLASS-315-3.5
	US-PATENT-CLASS-250-83.3R				US-PATENT-CLASS-315-5.38
	US-PATENT-CLASS-250-83R				US-PATENT-3,702,951
	US-PATENT-3,700,897		c09 N73-13209		NASA-CASE-XLA-05099
c14 N73-12446	NASA-CASE-NPO-11239				US-PATENT-APPL-SN-98798
	US-PATENT-APPL-SN-89211				US-PATENT-CLASS-235-152
	US-PATENT-CLASS-356-106				US-PATENT-CLASS-307-207
	US-PATENT-CLASS-356-114				US-PATENT-CLASS-307-215
	US-PATENT-3,700,334				US-PATENT-3,700,868
c14 N73-12447	NASA-CASE-NPO-11493		c10 N73-13235		NASA-CASE-KSC-10003
	US-PATENT-APPL-SN-151413				US-PATENT-APPL-SN-60883
	US-PATENT-CLASS-136-224				US-PATENT-CLASS-178-DIG.6
	US-PATENT-3,700,503				US-PATENT-CLASS-178-6
c15 N73-12486	NASA-CASE-KSC-10615				US-PATENT-CLASS-307-242
	US-PATENT-APPL-SN-103078				US-PATENT-CLASS-307-259
	US-PATENT-CLASS-62-7				US-PATENT-CLASS-328-104
	US-PATENT-CLASS-62-45				US-PATENT-CLASS-328-154
	US-PATENT-CLASS-244-1SB				US-PATENT-3,702,898
	US-PATENT-CLASS-244-135		c11 N73-13257		NASA-CASE-LAR-10574-1
	US-PATENT-3,697,021				US-PATENT-APPL-SN-66206
c15 N73-12487	NASA-CASE-FRC-10019				US-PATENT-CLASS-244-1SS
	US-PATENT-APPL-SN-880398				US-PATENT-3,698,659
	US-PATENT-CLASS-204-192		c14 N73-13415		NASA-CASE-LAR-10855-1
	US-PATENT-3,700,575				US-PATENT-APPL-SN-166541
c15 N73-12488	NASA-CASE-ARC-10345-1				US-PATENT-CLASS-73-147
	US-PATENT-APPL-SN-193671				US-PATENT-CLASS-73-182
	US-PATENT-CLASS-74-5F				US-PATENT-CLASS-73-189
	US-PATENT-CLASS-287-85R				US-PATENT-CLASS-73-212
	US-PATENT-CLASS-308-2A				US-PATENT-3,699,811
	US-PATENT-3,700,291		c14 N73-13416		NASA-CASE-GSC-11302-1
c15 N73-12489	NASA-CASE-MSC-12357				US-PATENT-APPL-SN-168650
	US-PATENT-APPL-SN-662763				US-PATENT-CLASS-73-71.6
	US-PATENT-CLASS-264-28				US-PATENT-3,699,807
	US-PATENT-CLASS-264-36		c14 N73-13417		NASA-CASE-XLP-05230-2
	US-PATENT-CLASS-264-40				US-PATENT-APPL-SN-147099
	US-PATENT-CLASS-264-102				US-PATENT-APPL-SN-877717
	US-PATENT-3,697,630				US-PATENT-CLASS-29-573
c15 N73-12492	NASA-CASE-XLA-8914				US-PATENT-CLASS-29-624
	US-PATENT-APPL-SN-810576				US-PATENT-CLASS-136-233
c15 N73-12495	NASA-CASE-NPO-13086-1				US-PATENT-3,699,645
	US-PATENT-APPL-SN-292477		c14 N73-13418		NASA-CASE-MFS-14216
c15 N73-12496	NASA-CASE-LAR-10961-1				US-PATENT-APPL-SN-50208
	US-PATENT-APPL-SN-308363				US-PATENT-CLASS-92-49
c17 N73-12547	NASA-CASE-LAR-10539-1				US-PATENT-CLASS-137-81
	US-PATENT-APPL-SN-136085				US-PATENT-CLASS-137-887.5
	US-PATENT-CLASS-23-230R				US-PATENT-3,698,412
	US-PATENT-3,701,631		c14 N73-13420		NASA-CASE-NPO-11418-1
c18 N73-12604	NASA-CASE-MFS-20408				US-PATENT-APPL-SN-193947
	US-PATENT-APPL-SN-71048				US-PATENT-CLASS-333-81B
	US-PATENT-CLASS-161-93				US-PATENT-CLASS-333-98R
	US-PATENT-3,700,538				US-PATENT-3,702,979
c30 N73-12884	NASA-CASE-MSC-12391		c14 N73-13435		NASA-CASE-GSC-11533-1
	US-PATENT-APPL-SN-106465				US-PATENT-APPL-SN-305013
	US-PATENT-CLASS-244-155		c15 N73-13462		NASA-CASE-NFC-11479
	US-PATENT-3,700,193				US-PATENT-APPL-SN-170440
c02 N73-13008	NASA-CASE-GSC-11077-1				US-PATENT-CLASS-137-81.5
	US-PATENT-APPL-SN-127618				US-PATENT-CLASS-137-608
	US-PATENT-CLASS-244-32				US-PATENT-CLASS-138-45

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-251-122	c07 N73-14130	NASA-CASE-NFO-11661
	US-PATENT-3,700,005		US-PATENT-APPL-SN-200682
c15 N73-13463	NASA-CASE-MFS-20317		US-PATENT-CLASS-343-782
	US-PATENT-APPL-SN-67730		US-PATENT-CLASS-343-837
	US-PATENT-CLASS-72-447		US-PATENT-CLASS-343-915
	US-PATENT-CLASS-72-476		US-PATENT-3,705,406
	US-PATENT-CLASS-173-131	c09 N73-14214	NASA-CASE-ARC-10467-1
	US-PATENT-3,699,799		US-PATENT-APPL-SN-212028
c15 N73-13464	NASA-CASE-NPO-10812		US-PATENT-CLASS-250-205
	US-PATENT-APPL-SN-129073		US-PATENT-CLASS-250-2113
	US-PATENT-CLASS-72-258		US-PATENT-CLASS-250-217SS
	US-PATENT-CLASS-425-113		US-PATENT-CLASS-307-310
	US-PATENT-CLASS-425-133		US-PATENT-CLASS-307-311
	US-PATENT-CLASS-425-176		US-PATENT-3,705,316
	US-PATENT-3,698,848	c09 N73-14215	NASA-CASE-IKS-00348
c15 N73-13465	NASA-CASE-LEW-10805-1		US-PATENT-APPL-SN-209802
	US-PATENT-APPL-SN-29917		US-PATENT-CLASS-40-130
	US-PATENT-CLASS-148-11.5R		US-PATENT-3,137,082
	US-PATENT-3,702,791	c14 N73-14427	NASA-CASE-NFO-10758
c15 N73-13466	NASA-CASE-MFS-20944		US-PATENT-APPL-SN-81096
	US-PATENT-APPL-SN-148756		US-PATENT-CLASS-95-12.5
	US-PATENT-CLASS-91-363A		US-PATENT-CLASS-95-59
	US-PATENT-CLASS-91-448		US-PATENT-CLASS-352-169
	US-PATENT-3,702,575		US-PATENT-3,704,659
c15 N73-13467	NASA-CASE-NPO-11369	c14 N73-14428	NASA-CASE-NPO-10764-1
	US-PATENT-APPL-SN-129072		US-PATENT-APPL-SN-836280
	US-PATENT-CLASS-60-1		US-PATENT-CLASS-252-408
	US-PATENT-CLASS-60-23		US-PATENT-3,700,603
	US-PATENT-CLASS-60-37	c14 N73-14429	NASA-CASE-NFO-11387
	US-PATENT-3,702,532		US-PATENT-APPL-SN-142719
c16 N73-13489	NASA-CASE-BQN-10654-1		US-PATENT-CLASS-73-57
	US-PATENT-APPL-SN-182978		US-PATENT-CLASS-73-60
	US-PATENT-CLASS-324-.5R		US-PATENT-3,706,221
	US-PATENT-CLASS-331-94	c15 N73-14469	NASA-CASE-GSC-10791-1
	US-PATENT-3,702,972		US-PATENT-APPL-SN-84289
c18 N73-13562	NASA-CASE-ARC-10196-1		US-PATENT-CLASS-29-589
	US-PATENT-APPL-SN-115082		US-PATENT-CLASS-29-591
	US-PATENT-CLASS-260-2.5P		US-PATENT-CLASS-174-52S
	US-PATENT-3,702,841		US-PATENT-CLASS-317-234A
c21 N73-13643	NASA-CASE-HQN-10703		US-PATENT-CLASS-317-234G
	US-PATENT-APPL-SN-156724		US-PATENT-3,705,255
	US-PATENT-CLASS-340-33	c18 N73-14584	NASA-CASE-LAB-10894-1
	US-PATENT-CLASS-340-97		US-PATENT-APPL-SN-189375
	US-PATENT-CLASS-343-112CA		US-PATENT-CLASS-106-39R
	US-PATENT-3,699,511		US-PATENT-CLASS-106-55
c21 N73-13644	NASA-CASE-NPO-11481		US-PATENT-CLASS-106-58
	US-PATENT-APPL-SN-134571		US-PATENT-CLASS-106-63
	US-PATENT-CLASS-74-5.22		US-PATENT-CLASS-264-DIG.36
	US-PATENT-CLASS-179-100.2A		US-PATENT-CLASS-264-65
	US-PATENT-CLASS-340-174.1R		US-PATENT-3,706,583
	US-PATENT-CLASS-346-74HD	c21 N73-14692	NASA-CASE-ENC-10392
	US-PATENT-CLASS-346-138		US-PATENT-APPL-SN-36534
	US-PATENT-3,697,968		US-PATENT-CLASS-340-27A1
c23 N73-13660	NASA-CASE-MFS-20809		US-PATENT-3,706,970
	US-PATENT-APPL-SN-173185	c31 N73-14853	NASA-CASE-GSC-10590-1
	US-PATENT-CLASS-315-169R		US-PATENT-APPL-SN-130353
	US-PATENT-CLASS-315-169TV		US-PATENT-CLASS-102-49.5
	US-PATENT-CLASS-317-101A		US-PATENT-3,706,281
	US-PATENT-3,700,961	c31 N73-14854	NASA-CASE-HSC-12433
c23 N73-13661	NASA-CASE-HSC-12404-1		US-PATENT-APPL-SN-103551
	US-PATENT-APPL-SN-142662		US-PATENT-CLASS-244-155
	US-PATENT-CLASS-356-106S		US-PATENT-3,702,688
	US-PATENT-3,702,735	c31 N73-14855	NASA-CASE-NFO-10680
c23 N73-13662	NASA-CASE-MFS-20243		US-PATENT-APPL-SN-104048
	US-PATENT-APPL-SN-59894		US-PATENT-CLASS-74-2
	US-PATENT-CLASS-250-51.5		US-PATENT-3,706,230
	US-PATENT-CLASS-250-52	c09 N73-15235	NASA-CASE-NFO-12106
	US-PATENT-3,702,933		US-PATENT-APPL-SN-175881
c28 N73-13773	NASA-CASE-LEW-10374-1		US-PATENT-CLASS-317-234V
	US-PATENT-APPL-SN-107380		US-PATENT-CLASS-317-235AG
	US-PATENT-CLASS-60-211		US-PATENT-CLASS-317-235K
	US-PATENT-CLASS-60-240		US-PATENT-CLASS-331-90
	US-PATENT-CLASS-60-243		US-PATENT-CLASS-331-107G
	US-PATENT-CLASS-137-81.5		US-PATENT-CLASS-331-177R
	US-PATENT-3,702,536		US-PATENT-3,694,771
c31 N73-13898	NASA-CASE-LAR-10549-1	c06 N73-16106	NASA-CASE-LAB-10668-1
	US-PATENT-APPL-SN-108824		US-PATENT-APPL-SN-172459
	US-PATENT-CLASS-60-291		US-PATENT-CLASS-23-232E
	US-PATENT-CLASS-244-139		US-PATENT-CLASS-23-232B
	US-PATENT-3,700,192		US-PATENT-CLASS-23-254E
c32 N73-13921	NASA-CASE-HSC-12233-2		US-PATENT-CLASS-23-254E
	US-PATENT-APPL-SN-107298		US-PATENT-CLASS-250-71R
	US-PATENT-CLASS-52-284		US-PATENT-CLASS-250-83.30V
	US-PATENT-CLASS-52-594		US-PATENT-3,709,663
	US-PATENT-CLASS-229-DIG.11	c07 N73-16121	NASA-CASE-NFO-11572
	US-PATENT-3,702,520		US-PATENT-APPL-SN-125234
c32 N73-13929	NASA-CASE-LAR-11052-1		US-PATENT-CLASS-179-15AN
	US-PATENT-APPL-SN-310611		US-PATENT-CLASS-179-15BC
			US-PATENT-CLASS-325-60

ACCESSION NUMBER INDEX

		US-PATENT-CLASS-343-200
		US-PATENT-3,710,257
c10	N73-16205	NASA-CASE-NPO-11282
		US-PATENT-APPL-SN-101354
		US-PATENT-CLASS-325-346
		US-PATENT-CLASS-325-419
		US-PATENT-3,740,261
c10	N73-16206	NASA-CASE-ERC-10285
		US-PATENT-APPL-SN-55333
		US-PATENT-CLASS-331-45
		US-PATENT-CLASS-343-100B
		US-PATENT-CLASS-343-100SA
		US-PATENT-CLASS-343-853
		US-PATENT-3,710,329
c14	N73-16483	NASA-CASE-ERC-10226-1
		US-PATENT-APPL-SN-124909
		US-PATENT-APPL-SN-808822
		US-PATENT-CLASS-250-209
		US-PATENT-CLASS-250-215
		US-PATENT-CLASS-250-217
		US-PATENT-CLASS-315-153
		US-PATENT-CLASS-340-25
		US-PATENT-CLASS-340-27R
		US-PATENT-3,708,671
c14	N73-16484	NASA-CASE-LAB-10739-1
		US-PATENT-APPL-SN-134567
		US-PATENT-CLASS-250-217F
		US-PATENT-CLASS-340-228S
		US-PATENT-CLASS-340-418
		US-PATENT-3,708,674
c16	N73-16536	NASA-CASE-LAB-10311-1
		US-PATENT-APPL-SN-31702
		US-PATENT-CLASS-250-199
		US-PATENT-CLASS-340-171
		US-PATENT-CLASS-350-293
		US-PATENT-3,710,122
c27	N73-16764	NASA-CASE-NPO-12015
		US-PATENT-APPL-SN-74862
		US-PATENT-CLASS-149-19
		US-PATENT-CLASS-149-36
		US-PATENT-3,708,359
c33	N73-16518	NASA-CASE-MSC-15567-1
		US-PATENT-APPL-SN-87551
		US-PATENT-CLASS-204-324
		US-PATENT-CLASS-204-325
		US-PATENT-CLASS-204-328
		US-PATENT-3,708,419
c02	N73-19004	NASA-CASE-ERC-10439
		US-PATENT-APPL-SN-54271
		US-PATENT-CLASS-244-17.13
		US-PATENT-CLASS-244-77D
		US-PATENT-CLASS-318-489
		US-PATENT-3,711,042
c09	N73-19234	NASA-CASE-GSC-11013-1
		US-PATENT-APPL-SN-200717
		US-PATENT-CLASS-343-754
		US-PATENT-CLASS-343-839
		US-PATENT-CLASS-343-854
		US-PATENT-CLASS-343-895
		US-PATENT-3,713,163
c09	N73-19235	NASA-CASE-MFS-20407
		US-PATENT-APPL-SN-116777
		US-PATENT-CLASS-317-235AM
		US-PATENT-CLASS-317-235N
		US-PATENT-CLASS-317-235R
		US-PATENT-CLASS-317-235T
		US-PATENT-CLASS-317-235OA
		US-PATENT-3,714,526
c14	N73-19419	NASA-CASE-LAB-10226-1
		US-PATENT-APPL-SN-98774
		US-PATENT-CLASS-95-11.5B
		US-PATENT-CLASS-95-11R
		US-PATENT-CLASS-250-217R
		US-PATENT-3,712,195
c14	N73-19420	NASA-CASE-MFS-20774
		US-PATENT-APPL-SN-161028
		US-PATENT-CLASS-73-84
		US-PATENT-3,712,121
c14	N73-19421	NASA-CASE-MFS-20242
		US-PATENT-APPL-SN-213004
		US-PATENT-CLASS-73-71.6
		US-PATENT-3,712,120
c15	N73-19457	NASA-CASE-MFS-20698-2
		US-PATENT-APPL-SN-3418
		US-PATENT-APPL-SN-136086
		US-PATENT-CLASS-423-446
		US-PATENT-CLASS-423-625
		US-PATENT-3,714,332
c15	N73-19458	NASA-CASE-LAB-10195-1

		US-PATENT-APPL-SN-201782
		US-PATENT-CLASS-259-4
		US-PATENT-3,712,591
c21	N73-19630	NASA-CASE-GSC-11188-2
		US-PATENT-APPL-SN-244440
c28	N73-19793	NASA-CASE-LER-11187-1
		US-PATENT-APPL-SN-147922
		US-PATENT-CLASS-60-39.28R
		US-PATENT-3,713,290
c28	N73-19819	NASA-CASE-LAR-10951-1
		US-PATENT-APPL-SN-331759
c03	N73-20039	NASA-CASE-GSC-10814-1
		US-PATENT-APPL-SN-41404
		US-PATENT-CLASS-244-15A
		US-PATENT-CLASS-244-1SS
		US-PATENT-3,715,092
c03	N73-20040	NASA-CASE-RFO-11771
		US-PATENT-APPL-SN-200762
		US-PATENT-CLASS-244-1.55
		US-PATENT-CLASS-250-212
		US-PATENT-CLASS-250-234
		US-PATENT-3,715,600
c05	N73-20137	NASA-CASE-LAR-10076-1
		US-PATENT-APPL-SN-84290
		US-PATENT-CLASS-62-259
		US-PATENT-CLASS-165-46
		US-PATENT-CLASS-312-1
		US-PATENT-3,713,480
c07	N73-20174	NASA-CASE-GSC-10087-4
		US-PATENT-APPL-SN-47440
		US-PATENT-APPL-SN-701679
		US-PATENT-CLASS-325-4
		US-PATENT-CLASS-325-5
		US-PATENT-CLASS-325-7
		US-PATENT-CLASS-325-8
		US-PATENT-CLASS-325-9
		US-PATENT-CLASS-325-12
		US-PATENT-CLASS-325-17
		US-PATENT-CLASS-325-63
		US-PATENT-CLASS-343-179
		US-PATENT-3,715,663
c07	N73-20175	NASA-CASE-RSC-10698
		US-PATENT-APPL-SN-213949
		US-PATENT-CLASS-73-170R
		US-PATENT-CLASS-324-72
		US-PATENT-3,715,660
c07	N73-20176	NASA-CASE-RSC-10521
		US-PATENT-APPL-SN-212921
		US-PATENT-CLASS-340-146.1C
		US-PATENT-CLASS-340-147R
		US-PATENT-CLASS-340-163
		US-PATENT-3,715,723
c08	N73-20217	NASA-CASE-LAR-10128-1
		US-PATENT-APPL-SN-84002
		US-PATENT-CLASS-235-92PQ
		US-PATENT-CLASS-235-92R
		US-PATENT-CLASS-235-92T
		US-PATENT-CLASS-340-347AD
		US-PATENT-3,714,645
c09	N73-20231	NASA-CASE-ARC-10264-1
		US-PATENT-APPL-SN-80368
		US-PATENT-CLASS-328-167
		US-PATENT-CLASS-330-86
		US-PATENT-CLASS-330-109
		US-PATENT-3,714,588
c09	N73-20232	NASA-CASE-RFS-21433
		US-PATENT-APPL-SN-236281
		US-PATENT-CLASS-307-230
		US-PATENT-CLASS-307-304
		US-PATENT-CLASS-330-20
		US-PATENT-CLASS-330-22
		US-PATENT-CLASS-330-30D
		US-PATENT-CLASS-330-35
		US-PATENT-CLASS-330-40
		US-PATENT-CLASS-330-80T
		US-PATENT-3,715,693
c10	N73-20253	NASA-CASE-LAR-10310-1
		US-PATENT-APPL-SN-147103
		US-PATENT-CLASS-235-197
		US-PATENT-3,714,405
c10	N73-20254	NASA-CASE-RFO-11868
		US-PATENT-APPL-SN-192101
		US-PATENT-CLASS-307-221B
		US-PATENT-CLASS-328-37
		US-PATENT-CLASS-328-61
		US-PATENT-CLASS-328-187
		US-PATENT-3,718,863
c11	N73-20267	NASA-CASE-RFS-21362

ACCESSION NUMBER INDEX

	US-PATENT-APPL-SN-211411		US-PATENT-CLASS-102-49.8
	US-PATENT-CLASS-73-432SD		US-PATENT-3,729,935
	US-PATENT-3,714,833	c05 N73-25125	NASA-CASE-MFS-20332-2
c14 N73-20474	NASA-CASE-ERC-10350		US-PATENT-APPL-SN-195061
	US-PATENT-APPL-SN-55535		US-PATENT-APPL-SN-869260
	US-PATENT-CLASS-340-278		US-PATENT-CLASS-2-2.1A
	US-PATENT-3,714,624		US-PATENT-CLASS-128-14.5
c14 N73-20475	NASA-CASE-LAR-10726-1		US-PATENT-CLASS-137-538
	US-PATENT-APPL-SN-146935		US-PATENT-3,720,208
	US-PATENT-CLASS-250-83.3B	c07 N73-25160	NASA-CASE-ARC-10097-2
	US-PATENT-CLASS-250-231		US-PATENT-APPL-SN-115083
	US-PATENT-3,714,432		US-PATENT-APPL-SN-768662
c14 N73-20476	NASA-CASE-MFS-20673		US-PATENT-CLASS-325-45
	US-PATENT-APPL-SN-94049		US-PATENT-CLASS-325-61
	US-PATENT-CLASS-73-90		US-PATENT-CLASS-325-113
	US-PATENT-CLASS-73-91		US-PATENT-CLASS-325-139
	US-PATENT-3,714,821		US-PATENT-CLASS-340-207
c14 N73-20477	NASA-CASE-ARC-10443-1		US-PATENT-CLASS-340-258B
	US-PATENT-APPL-SN-128419		US-PATENT-3,719,891
	US-PATENT-CLASS-250-83.3B	c07 N73-25161	NASA-CASE-NPO-11707
	US-PATENT-CLASS-250-83R		US-PATENT-APPL-SN-196399
	US-PATENT-3,715,590		US-PATENT-CLASS-343-6.5B
c14 N73-20478	NASA-CASE-NPO-10985		US-PATENT-CLASS-343-6.8B
	US-PATENT-APPL-SN-74759		US-PATENT-3,729,736
	US-PATENT-CLASS-73-194E	c08 N73-25206	NASA-CASE-NPO-11497
	US-PATENT-CLASS-324-30R		US-PATENT-APPL-SN-155565
	US-PATENT-CLASS-324-65P		US-PATENT-CLASS-235-10.2
	US-PATENT-3,712,132		US-PATENT-CLASS-235-92CV
c15 N73-20514	NASA-CASE-NPO-11213		US-PATENT-CLASS-235-92DN
	US-PATENT-APPL-SN-78703		US-PATENT-CLASS-235-92BA
	US-PATENT-CLASS-195-127		US-PATENT-CLASS-235-92EV
	US-PATENT-3,713,987		US-PATENT-CLASS-235-92R
c15 N73-20535	NASA-CASE-LAR-11072-1		US-PATENT-CLASS-235-151.27
	US-PATENT-APPL-SN-280030		US-PATENT-3,729,129
c32 N73-20740	NASA-CASE-LAR-10765-1	c10 N73-25240	NASA-CASE-HSC-12428-1
	US-PATENT-APPL-SN-138230		US-PATENT-APPL-SA-170681
	US-PATENT-CLASS-73-88A		US-PATENT-CLASS-179-1SA
	US-PATENT-CLASS-356-32		US-PATENT-CLASS-235-151.31
	US-PATENT-3,715,915		US-PATENT-CLASS-324-77E
c23 N73-20741	NASA-CASE-ARC-10194-1		US-PATENT-CLASS-324-78J
	US-PATENT-APPL-SN-107659		US-PATENT-3,732,405
	US-PATENT-CLASS-350-202	c10 N73-25241	NASA-CASE-GSC-11239-1
	US-PATENT-3,715,152		US-PATENT-APPL-SN-180683
c31 N73-20880	NASA-CASE-LAR-10788-1		US-PATENT-CLASS-325-67
	US-PATENT-APPL-SN-340865		US-PATENT-CLASS-325-363
c07 N73-22076	NASA-CASE-NPO-10166-1		US-PATENT-3,737,781
	US-PATENT-APPL-SN-192803	c10 N73-25243	NASA-CASE-MFS-21919-1
c27 N73-22710	NASA-CASE-NPO-10893		US-PATENT-APPL-SN-193456
	US-PATENT-APPL-SN-845584		US-PATENT-CLASS-317-100
	US-PATENT-CLASS-260-94.8		US-PATENT-CLASS-317-101DH
	US-PATENT-3,634,383		US-PATENT-3,735,206
c07 N73-24176	NASA-CASE-NPO-11751	c12 N73-25262	NASA-CASE-LAR-10578-1
	US-PATENT-APPL-SN-192141		US-PATENT-APPL-SN-233098
	US-PATENT-CLASS-343-DIG.2		US-PATENT-CLASS-73-147
	US-PATENT-CLASS-343-915		US-PATENT-3,731,528
	US-PATENT-3,729,743	c14 N73-25460	NASA-CASE-MFS-20916
c07 N73-24187	NASA-CASE-GSC-11388-1		US-PATENT-APPL-SN-212165
	US-PATENT-APPL-SN-306980		US-PATENT-CLASS-73-189
c14 N73-24472	NASA-CASE-LER-11072-1		US-PATENT-3,731,531
	US-PATENT-APPL-SN-104885	c14 N73-25461	NASA-CASE-KSC-10108
	US-PATENT-CLASS-136-225		US-PATENT-APPL-SN-73922
	US-PATENT-3,729,343		US-PATENT-CLASS-343-6.8B
c14 N73-24473	NASA-CASE-MFS-20418		US-PATENT-CLASS-343-14
	US-PATENT-APPL-SN-162101		US-PATENT-CLASS-343-17.5
	US-PATENT-CLASS-128-206F		US-PATENT-3,732,567
	US-PATENT-CLASS-324-78E	c14 N73-25462	NASA-CASE-NPO-11686
	US-PATENT-3,729,676		US-PATENT-APPL-SN-212900
c15 N73-24513	NASA-CASE-NPO-11417		US-PATENT-CLASS-250-83.3B
	US-PATENT-APPL-SN-120241		US-PATENT-CLASS-250-203B
	US-PATENT-CLASS-60-25		US-PATENT-CLASS-250-214
	US-PATENT-CLASS-417-391		US-PATENT-CLASS-250-214
	US-PATENT-3,732,040		US-PATENT-CLASS-356-152
c17 N73-24569	NASA-CASE-LER-10920-1		US-PATENT-3,723,475
	US-PATENT-APPL-SN-106424	c14 N73-25463	NASA-CASE-ARC-10278-1
	US-PATENT-CLASS-204-192		US-PATENT-APPL-SN-154933
	US-PATENT-3,732,158		US-PATENT-CLASS-356-110
c28 N73-24783	NASA-CASE-NPO-11880		US-PATENT-3,729,260
	US-PATENT-APPL-SN-209535	c15 N73-25512	NASA-CASE-LAR-10129-1
	US-PATENT-CLASS-60-202		US-PATENT-APPL-SN-99201
	US-PATENT-CLASS-313-DIG.8		US-PATENT-CLASS-24-139B
	US-PATENT-CLASS-313-63		US-PATENT-CLASS-182-5
	US-PATENT-CLASS-313-204		US-PATENT-CLASS-188-65.1
	US-PATENT-CLASS-313-231		US-PATENT-CLASS-254-156
	US-PATENT-3,728,861		US-PATENT-3,729,06E
c28 N73-24784	NASA-CASE-NPO-11559	c15 N73-25513	NASA-CASE-GSC-11203-1
	US-PATENT-APPL-SN-147996		US-PATENT-APPL-SN-10737E
	US-PATENT-CLASS-60-254		US-PATENT-CLASS-188-26A
	US-PATENT-CLASS-60-256		US-PATENT-CLASS-244-15A
	US-PATENT-CLASS-102-49.7		US-PATENT-3,737,118

ACCESSION NUMBER INDEX

c25 N73-25760	NASA-CASE-LEW-11180-1 US-PATENT-APPL-SN-175852 US-PATENT-CLASS-60-202 US-PATENT-CLASS-313-161 US-PATENT-CLASS-313-231 US-PATENT-3,735,591	US-PATENT-CLASS-340-172.5 US-PATENT-3,740,725
c33 N73-25552	NASA-CASE-LEW-10359-2 US-PATENT-APPL-SN-47063 US-PATENT-APPL-SN-150215 US-PATENT-CLASS-60-200A US-PATENT-CLASS-60-265 US-PATENT-CLASS-60-267 US-PATENT-CLASS-62-467 US-PATENT-CLASS-102-105 US-PATENT-CLASS-244-117A US-PATENT-3,720,075	c09 N73-26195 NASA-CASE-GSC-10990-1 US-PATENT-APPL-SN-94329 US-PATENT-CLASS-333-73B US-PATENT-CLASS-333-73S US-PATENT-CLASS-333-82A US-PATENT-CLASS-333-84B US-PATENT-3,737,815
c02 N73-26004	NASA-CASE-LAR-10682-1 US-PATENT-APPL-SN-127915 US-PATENT-CLASS-244-75A US-PATENT-CLASS-244-76C US-PATENT-CLASS-244-77F US-PATENT-CLASS-244-77G US-PATENT-3,734,432	c10 N73-26228 NASA-CASE-BRC-10403-1 US-PATENT-APPL-SN-253405 US-PATENT-CLASS-317-DIG.6 US-PATENT-CLASS-321-11 US-PATENT-CLASS-321-45C US-PATENT-3,737,757
c02 N73-26005	NASA-CASE-ARC-10470-1 US-PATENT-APPL-SN-206279 US-PATENT-CLASS-244-13 US-PATENT-CLASS-244-46 US-PATENT-CLASS-244-55 US-PATENT-3,737,121	c10 N73-26229 NASA-CASE-NFO-11569 US-PATENT-APPL-SN-199957 US-PATENT-CLASS-307-220 US-PATENT-CLASS-307-233 US-PATENT-3,737,676
c02 N73-26006	NASA-CASE-HSC-12393-1 US-PATENT-APPL-SN-203405 US-PATENT-CLASS-9-2A US-PATENT-CLASS-9-3 US-PATENT-CLASS-9-11A US-PATENT-CLASS-114-122 US-PATENT-3,736,607	c10 N73-26230 NASA-CASE-HSC-13907-1 US-PATENT-APPL-SN-254177 US-PATENT-CLASS-235-186 US-PATENT-CLASS-235-194 US-PATENT-CLASS-235-197 US-PATENT-3,737,639
c02 N73-26008	NASA-CASE-LAR-11087-1 US-PATENT-APPL-SN-367267	c11 N73-26238 NASA-CASE-NFO-11366 US-PATENT-APPL-SN-144139 US-PATENT-CLASS-180-6.5 US-PATENT-CLASS-180-7B US-PATENT-CLASS-180-8A US-PATENT-CLASS-180-9.2B US-PATENT-CLASS-180-9.5 US-PATENT-CLASS-180-41 US-PATENT-CLASS-305-35BB US-PATENT-CLASS-305-39 US-PATENT-3,730,287
c05 N73-26071	NASA-CASE-ARC-10599-1 US-PATENT-APPL-SN-247481 US-PATENT-CLASS-2-2.1 US-PATENT-CLASS-62-89 US-PATENT-CLASS-62-176 US-PATENT-CLASS-62-207 US-PATENT-CLASS-62-209 US-PATENT-CLASS-62-259 US-PATENT-CLASS-165-46 US-PATENT-3,736,764	c14 N73-26430 NASA-CASE-NFO-11304 US-PATENT-APPL-SN-101214 US-PATENT-CLASS-219-50 US-PATENT-CLASS-219-499 US-PATENT-3,733,463
c05 N73-26072	NASA-CASE-ARC-10329-1 US-PATENT-APPL-SN-159857 US-PATENT-CLASS-128-2.1B US-PATENT-CLASS-351-23 US-PATENT-CLASS-351-30 US-PATENT-CLASS-351-36 US-PATENT-3,737,217	c14 N73-26431 NASA-CASE-HSC-12363-1 US-PATENT-APPL-SN-125236 US-PATENT-CLASS-95-1.1 US-PATENT-3,736,849
c06 N73-26100	NASA-CASE-GSC-11358-1 US-PATENT-APPL-SN-226551 US-PATENT-CLASS-260-46.5B US-PATENT-3,733,350	c14 N73-26432 NASA-CASE-BRC-10276 US-PATENT-APPL-SN-24155 US-PATENT-CLASS-250-209 US-PATENT-CLASS-340-15.56C US-PATENT-CLASS-343-100B US-PATENT-3,737,905
c07 N73-26117	NASA-CASE-KSC-10392 US-PATENT-APPL-SN-181024 US-PATENT-CLASS-343-880 US-PATENT-CLASS-343-883 US-PATENT-CLASS-343-889 US-PATENT-CLASS-343-895 US-PATENT-3,737,912	c15 N73-26472 NASA-CASE-KSC-10639 US-PATENT-APPL-SN-181024 US-PATENT-CLASS-137-397 US-PATENT-CLASS-137-582 US-PATENT-3,736,956
c07 N73-26118	NASA-CASE-NFO-11548 US-PATENT-APPL-SN-151411 US-PATENT-CLASS-179-15A US-PATENT-CLASS-179-15B US-PATENT-CLASS-325-40 US-PATENT-CLASS-343-204 US-PATENT-3,737,776	c18 N73-26572 NASA-CASE-ARC-10304-1 US-PATENT-APPL-SN-140946 US-PATENT-CLASS-252-8.1 US-PATENT-3,730,891
c07 N73-26119	NASA-CASE-NFO-11426 US-PATENT-APPL-SN-89210 US-PATENT-CLASS-250-199 US-PATENT-CLASS-331-94.5 US-PATENT-CLASS-332-7.51 US-PATENT-CLASS-356-4 US-PATENT-CLASS-356-5 US-PATENT-3,737,231	c26 N73-26751 NASA-CASE-HFS-20675 US-PATENT-APPL-SN-200085 US-PATENT-CLASS-250-219TH US-PATENT-CLASS-356-108 US-PATENT-CLASS-356-161 US-PATENT-CLASS-356-202 US-PATENT-3,737,237
c08 N73-26175	NASA-CASE-NFO-11821-1 US-PATENT-APPL-SN-236285 US-PATENT-CLASS-235-152 US-PATENT-CLASS-235-164 US-PATENT-CLASS-328-167 US-PATENT-3,732,409	c26 N73-26752 NASA-CASE-LEW-11726-1 US-PATENT-APPL-SN-280031 US-PATENT-CLASS-29-599 US-PATENT-CLASS-156-18 US-PATENT-CLASS-174-DIG.6 US-PATENT-CLASS-336-DIG.1 US-PATENT-CLASS-336-200 US-PATENT-3,737,824
c08 N73-26176	NASA-CASE-NFO-11456 US-PATENT-APPL-SN-153543	c31 N73-26876 NASA-CASE-HFS-20863 US-PATENT-APPL-SN-159966 US-PATENT-CLASS-244-1SD US-PATENT-CLASS-244-137F US-PATENT-3,737,117
		c32 N73-26910 NASA-CASE-LAR-10756-1 US-PATENT-APPL-SN-160859 US-PATENT-CLASS-73-67.3 US-PATENT-CLASS-73-88.5B US-PATENT-CLASS-73-91 US-PATENT-CLASS-235-92MT US-PATENT-3,733,424
		c33 N73-26958 NASA-CASE-NFO-11330

ACCESSION NUMBER INDEX

	US-PATENT-APPL-SN-118269		US-PATENT-APPL-SN-182033
	US-PATENT-CLASS-285-DIG. 21		US-PATENT-CLASS-73-86
	US-PATENT-CLASS-285-316		US-PATENT-CLASS-73-339
	US-PATENT-3,737,181		US-PATENT-CLASS-73-432R
c04 N73-27052	NASA-CASE-GSC-11092-2		US-PATENT-CLASS-356-72
	US-PATENT-APPL-SN-60950		US-PATENT-3,745,816
	US-PATENT-APPL-SN-139250	c05 N73-27941	NASA-CASE-HFS-21109-1
	US-PATENT-CLASS-103.5R		US-PATENT-APPL-SN-202769
	US-PATENT-3,745,090		US-PATENT-CLASS-73-379
c05 N73-27062	NASA-CASE-LEW-11669-1		US-PATENT-CLASS-128-2.05R
	US-PATENT-APPL-SN-198885		US-PATENT-CLASS-128-2.06R
	US-PATENT-CLASS-32-28		US-PATENT-CLASS-272-73
	US-PATENT-CLASS-32-58		US-PATENT-3,744,480
	US-PATENT-CLASS-128-2	c06 N73-27980	NASA-CASE-LEW-11325-1
	US-PATENT-CLASS-128-24A		US-PATENT-APPL-SN-184960
	US-PATENT-CLASS-128-305		US-PATENT-CLASS-117-161F
	US-PATENT-3,736,938		US-PATENT-CLASS-117-1610H
c06 N73-27086	NASA-CASE-GSC-10225-1		US-PATENT-CLASS-117-228
	US-PATENT-APPL-SN-710621		US-PATENT-CLASS-161-214
	US-PATENT-CLASS-195-66R		US-PATENT-CLASS-161-227
	US-PATENT-3,745,089		US-PATENT-CLASS-260-30.2
c09 N73-27150	NASA-CASE-ERC-10224-2		US-PATENT-CLASS-260-30.8DS
	US-PATENT-APPL-SN-221833		US-PATENT-CLASS-260-32.6H
	US-PATENT-APPL-SN-868775		US-PATENT-CLASS-260-33.4R
	US-PATENT-CLASS-29-580		US-PATENT-CLASS-260-33.6R
	US-PATENT-CLASS-317-234G		US-PATENT-CLASS-260-47CP
	US-PATENT-CLASS-317-234L		US-PATENT-CLASS-260-65
	US-PATENT-CLASS-317-234H		US-PATENT-CLASS-260-78TF
	US-PATENT-CLASS-317-234N		US-PATENT-CLASS-260-780A
	US-PATENT-CLASS-317-234R		US-PATENT-3,745,149
	US-PATENT-3,742,316	c07 N73-28012	NASA-CASE-NFO-11593-1
c10 N73-27171	NASA-CASE-NFO-11941-1		US-PATENT-APPL-SN-172807
	US-PATENT-APPL-SN-241614		US-PATENT-CLASS-179-15FS
	US-PATENT-CLASS-330-70CR		US-PATENT-CLASS-325-419
	US-PATENT-CLASS-331-17		US-PATENT-CLASS-329-122
	US-PATENT-CLASS-331-25		US-PATENT-3,745,255
	US-PATENT-3,740,671	c07 N73-28013	NASA-CASE-GSC-11046-1
c14 N73-27376	NASA-CASE-BQN-10037-1		US-PATENT-APPL-SN-182399
	US-PATENT-APPL-SN-235957		US-PATENT-CLASS-343-725
	US-PATENT-CLASS-73-28		US-PATENT-CLASS-343-729
	US-PATENT-3,741,001		US-PATENT-CLASS-343-797
c14 N73-27377	NASA-CASE-HFS-21046-1		US-PATENT-CLASS-343-803
	US-PATENT-APPL-SN-156725		US-PATENT-CLASS-343-893
	US-PATENT-CLASS-35-12C		US-PATENT-3,747,111
	US-PATENT-CLASS-272-73	c08 N73-28045	NASA-CASE-INE-00477
	US-PATENT-3,744,794		US-PATENT-APPL-SN-175497
c14 N73-27378	NASA-CASE-KSC-10626		US-PATENT-CLASS-340-347
	US-PATENT-APPL-SN-180963		US-PATENT-3,219,997
	US-PATENT-CLASS-222-414	c09 N73-28083	NASA-CASE-GSC-11215-1
	US-PATENT-CLASS-244-15S		US-PATENT-APPL-SN-114873
	US-PATENT-CLASS-244-135		US-PATENT-CLASS-29-628
	US-PATENT-3,744,738		US-PATENT-CLASS-29-629
c14 N73-27379	NASA-CASE-FRC-10060-1		US-PATENT-CLASS-29-630
	US-PATENT-APPL-SN-189290		US-PATENT-CLASS-29-630A
	US-PATENT-CLASS-73-10V		US-PATENT-3,744,128
	US-PATENT-CLASS-179-175.1A	c09 N73-28084	NASA-CASE-INE-03623
	US-PATENT-CLASS-340-5C		US-PATENT-APPL-SN-471154
	US-PATENT-3,744,294		US-PATENT-CLASS-178-69.5
c15 N73-27405	NASA-CASE-HFS-20855		US-PATENT-3,402,265
	US-PATENT-APPL-SN-127647	c12 N73-28144	NASA-CASE-LAR-10612-1
	US-PATENT-CLASS-53-22A		US-PATENT-APPL-SN-233173
	US-PATENT-CLASS-53-112A		US-PATENT-CLASS-73-147
	US-PATENT-CLASS-219-348		US-PATENT-3,744,305
	US-PATENT-3,745,739	c14 N73-28486	NASA-CASE-NFO-11749
c15 N73-27406	NASA-CASE-NFO-11377		US-PATENT-APPL-SN-175267
	US-PATENT-APPL-SN-187262		US-PATENT-CLASS-73-15R
	US-PATENT-CLASS-137-1		US-PATENT-CLASS-324-52
	US-PATENT-CLASS-137-154		US-PATENT-3,737,762
	US-PATENT-CLASS-137-604	c14 N73-28488	NASA-CASE-LEW-11159-1
	US-PATENT-3,744,510		US-PATENT-APPL-SN-104346
c15 N73-27407	NASA-CASE-KSC-10752-1		US-PATENT-CLASS-250-336
	US-PATENT-APPL-SN-372143		US-PATENT-CLASS-307-308
c17 N73-27446	NASA-CASE-LAR-10953-1		US-PATENT-3,745,357
	US-PATENT-APPL-SN-163152	c14 N73-28489	NASA-CASE-GSC-11074-1
	US-PATENT-CLASS-23-230R		US-PATENT-APPL-SN-198362
	US-PATENT-3,744,972		US-PATENT-CLASS-34-155
c27 N73-27695	NASA-CASE-LEW-11071-1		US-PATENT-CLASS-34-160
	US-PATENT-APPL-SN-370581		US-PATENT-CLASS-34-162
c28 N73-27699	NASA-CASE-XLR-10453-2		US-PATENT-3,744,148
	US-PATENT-APPL-SN-180473	c14 N73-28490	NASA-CASE-GSC-11444-1
	US-PATENT-APPL-SN-758540		US-PATENT-CLASS-250-203R
	US-PATENT-CLASS-60-202		US-PATENT-CLASS-250-209
	US-PATENT-CLASS-313-63		US-PATENT-CLASS-250-214R
	US-PATENT-CLASS-313-217		US-PATENT-CLASS-356-141
	US-PATENT-CLASS-313-218		US-PATENT-3,744,913
	US-PATENT-CLASS-313-230		NASA-CASE-INE-05231
	US-PATENT-CLASS-313-355	c14 N73-28491	US-PATENT-APPL-SN-524746
	US-PATENT-3,744,247		US-PATENT-CLASS-250-51.5
c33 N73-27796	NASA-CASE-LAR-10439-1		

ACCESSION NUMBER INDEX

c14 N73-2E499 US-PATENT-3,440,419
 NASA-CASE-GSC-11690-1
 US-PATENT-APPL-SN-379290
 c15 N73-2E515 NASA-CASE-LEW-10533-1
 US-PATENT-APPL-SN-134658
 US-PATENT-CLASS-27-498
 US-PATENT-CLASS-29-497.5
 US-PATENT-CLASS-219-62
 US-PATENT-CLASS-219-107
 US-PATENT-3,745,300
 c15 N73-2E516 NASA-CASE-KNP-01187
 US-PATENT-APPL-SN-155598
 US-PATENT-CLASS-317-158
 US-PATENT-3,244,983
 c17 N73-2E573 NASA-CASE-KNP-08876
 US-PATENT-APPL-SN-527331
 US-PATENT-CLASS-75-66
 US-PATENT-3,419,384
 c22 N73-28660 NASA-CASE-LEW-11645-2
 US-PATENT-APPL-SN-376258
 c26 N73-28710 NASA-CASE-KNP-01185
 US-PATENT-APPL-SN-155595
 US-PATENT-CLASS-317-158
 US-PATENT-3,198,994
 c05 N73-30078 NASA-CASE-MPS-21010-1
 US-PATENT-APPL-SN-251609
 US-PATENT-CLASS-73-379
 US-PATENT-3,750,479
 c06 N73-30097 NASA-CASE-LAR-10670-1
 US-PATENT-APPL-SN-59892
 US-PATENT-CLASS-60-215
 US-PATENT-CLASS-149-1
 US-PATENT-CLASS-149-36
 US-PATENT-CLASS-252-301.4
 US-PATENT-CLASS-252-305
 US-PATENT-3,751,913
 c06 N73-30098 NASA-CASE-MPS-21040-1
 US-PATENT-APPL-SN-183240
 US-PATENT-CLASS-260-485F
 US-PATENT-3,752,847
 c06 N73-30099 NASA-CASE-MPS-10512
 US-PATENT-APPL-SN-606027
 US-PATENT-CLASS-260-77.5
 US-PATENT-3,463,761
 c06 N73-30100 NASA-CASE-MPS-10506
 US-PATENT-APPL-SN-606036
 US-PATENT-CLASS-260-77.5
 US-PATENT-3,463,762
 c06 N73-30101 NASA-CASE-MPS-10507
 US-PATENT-APPL-SN-605994
 US-PATENT-CLASS-260-615
 US-PATENT-3,452,103
 c06 N73-30102 NASA-CASE-MPS-11492
 US-PATENT-APPL-SN-707440
 US-PATENT-CLASS-260-2
 US-PATENT-3,577,356
 c06 N73-30103 NASA-CASE-MPS-10509
 US-PATENT-APPL-SN-605964
 US-PATENT-CLASS-260-77.5
 US-PATENT-3,475,384
 c07 N73-30113 NASA-CASE-NPO-11628-1
 US-PATENT-APPL-SN-207211
 US-PATENT-CLASS-325-420
 US-PATENT-CLASS-325-422
 US-PATENT-CLASS-329-120
 US-PATENT-3,746,998
 c07 N73-30115 NASA-CASE-KSC-10654-1
 US-PATENT-APPL-SN-250766
 US-PATENT-CLASS-178-DIG. 23
 US-PATENT-CLASS-178-6.6DD
 US-PATENT-CLASS-178-6.8
 US-PATENT-CLASS-179-15BS
 US-PATENT-3,749,831
 c08 N73-30135 NASA-CASE-NPO-10817-1
 US-PATENT-APPL-SN-82649
 US-PATENT-CLASS-250-229
 US-PATENT-CLASS-250-237R
 US-PATENT-CLASS-250-239
 US-PATENT-3,745,352
 c09 N73-30181 NASA-CASE-MPS-21214-1
 US-PATENT-APPL-SN-235269
 US-PATENT-CLASS-313-161
 US-PATENT-CLASS-315-248
 US-PATENT-CLASS-315-324
 US-PATENT-3,745,410
 c09 N73-30185 NASA-CASE-NPO-11738-1
 US-PATENT-APPL-SN-235295
 US-PATENT-CLASS-335-296
 US-PATENT-CLASS-335-297

c10 N73-30205 US-PATENT-3,750,667
 NASA-CASE-NPO-11307-1
 US-PATENT-APPL-SN-169671
 US-PATENT-CLASS-340-277
 US-PATENT-CLASS-340-279
 US-PATENT-3,750,131
 c14 N73-30386 NASA-CASE-MPS-20658-1
 US-PATENT-APPL-SN-205675
 US-PATENT-CLASS-324-79D
 US-PATENT-CLASS-328-48
 US-PATENT-CLASS-328-129
 US-PATENT-CLASS-328-134
 US-PATENT-3,745,475
 c14 N73-30388 NASA-CASE-NPO-11291-1
 US-PATENT-APPL-SN-116790
 US-PATENT-CLASS-324-29.5
 US-PATENT-CLASS-324-57R
 US-PATENT-CLASS-324-62R
 US-PATENT-CLASS-324-95
 US-PATENT-3,750,016
 c14 N73-30389 NASA-CASE-MPS-20546-2
 US-PATENT-APPL-SN-51317
 US-PATENT-CLASS-250-65R
 US-PATENT-CLASS-250-105
 US-PATENT-3,749,911
 c14 N73-30390 NASA-CASE-IGS-07752
 US-PATENT-APPL-SN-533659
 US-PATENT-CLASS-73-4
 US-PATENT-3,395,565
 c14 N73-30391 NASA-CASE-XIA-05087
 US-PATENT-APPL-SN-459407
 US-PATENT-CLASS-315-111
 US-PATENT-3,394,286
 c14 N73-30392 NASA-CASE-MPS-21441-1
 US-PATENT-APPL-SN-231662
 US-PATENT-CLASS-250-394
 US-PATENT-CLASS-250-518
 US-PATENT-3,752,986
 c14 N73-30393 NASA-CASE-GSC-11487-1
 US-PATENT-APPL-SN-193814
 US-PATENT-CLASS-250-203
 US-PATENT-CLASS-350-55
 US-PATENT-CLASS-350-199
 US-PATENT-CLASS-350-204
 US-PATENT-3,752,554
 c14 N73-30394 NASA-CASE-LAR-10000
 US-PATENT-APPL-SN-613235
 US-PATENT-CLASS-73-398
 US-PATENT-3,446,075
 c14 N73-30395 NASA-CASE-LAR-10623-1
 US-PATENT-APPL-SN-214086
 US-PATENT-CLASS-15-415
 US-PATENT-CLASS-73-28
 US-PATENT-CLASS-73-421.5R
 US-PATENT-3,748,905
 c15 N73-30457 NASA-CASE-GSC-11149-1
 US-PATENT-APPL-SN-152849
 US-PATENT-CLASS-29-452
 US-PATENT-CLASS-81-57.38
 US-PATENT-CLASS-254-29A
 US-PATENT-3,749,362
 c15 N73-30458 NASA-CASE-LEW-11087-1
 US-PATENT-APPL-SN-201904
 US-PATENT-CLASS-308-188
 US-PATENT-CLASS-308-193
 US-PATENT-3,751,123
 c15 N73-30459 NASA-CASE-MSC-13587-1
 US-PATENT-APPL-SN-206698
 US-PATENT-CLASS-137-516.27
 US-PATENT-CLASS-137-535
 US-PATENT-3,749,123
 c15 N73-30460 NASA-CASE-HQN-10638-1
 US-PATENT-APPL-SN-212977
 US-PATENT-CLASS-188-1C
 US-PATENT-CLASS-297-386
 US-PATENT-3,749,205
 c16 N73-30476 NASA-CASE-MPS-20823-1
 US-PATENT-APPL-SN-175981
 US-PATENT-CLASS-350-3.5
 US-PATENT-CLASS-356-108
 US-PATENT-CLASS-356-109
 US-PATENT-3,744,912
 c18 N73-30532 NASA-CASE-BEC-10339-1
 US-PATENT-APPL-SN-43883
 US-PATENT-CLASS-156-285
 US-PATENT-3,745,082
 c21 N73-30640 NASA-CASE-GSC-10890-1
 US-PATENT-APPL-SN-111998

ACCESSION NUMBER INDEX

		US-PATENT-CLASS-244-1SA				US-PATENT-CLASS-26C-448.2D
		US-PATENT-CLASS-250-203R				US-PATENT-3,763,204
		US-PATENT-CLASS-250-209				NASA-CASE-HSC-12458-1
		US-PATENT-CLASS-250-236		c08 N73-32081	.....	US-PATENT-APPL-SN-188927
		US-PATENT-3,752,993				US-PATENT-CLASS-235-1521E
c21 N73-30641	.....	NASA-CASE-LAR-10717-1				US-PATENT-CLASS-340-347DA
		US-PATENT-AFEL-SN-242028				US-PATENT-3,754,236
		US-PATENT-CLASS-343-6.5R		c09 N73-32107	.....	NASA-CASE-MFS-20207-1
		US-PATENT-CLASS-343-112CA				US-PATENT-APPL-SN-239574
		US-PATENT-3,750,168				US-PATENT-CLASS-318-254
c23 N73-30665	.....	NASA-CASE-LEW-11326-1				US-PATENT-CLASS-318-328
		US-PATENT-AFEL-SN-192970				US-PATENT-3,757,183
		US-PATENT-CLASS-60-39.65		c09 N73-32108	.....	NASA-CASE-GSC-11368-1
		US-PATENT-CLASS-60-39.66				US-PATENT-APPL-SN-237029
		US-PATENT-CLASS-60-39.72				US-PATENT-CLASS-136-24
		US-PATENT-CLASS-60-39.74R				US-PATENT-3,759,746
		US-PATENT-CLASS-431-9		c09 N73-32109	.....	NASA-CASE-GSC-11394-1
		US-PATENT-CLASS-431-173				US-PATENT-APPL-SN-292698
		US-PATENT-3,748,853				US-PATENT-CLASS-136-89
c23 N73-30666	.....	NASA-CASE-GSC-11296-1				US-PATENT-CLASS-250-212
		US-PATENT-APPL-SN-228190				US-PATENT-CLASS-321-1.5
		US-PATENT-CLASS-350-55				US-PATENT-3,760,257
		US-PATENT-CLASS-350-162SF		c09 N73-32110	.....	NASA-CASE-KSC-10729-1
		US-PATENT-3,752,564				US-PATENT-APPL-SN-221714
c31 N73-30829	.....	NASA-CASE-GSC-11018-1				US-PATENT-CLASS-343-112E
		US-PATENT-AFEL-SN-244523				US-PATENT-CLASS-343-113E
		US-PATENT-CLASS-165-32				US-PATENT-3,754,263
		US-PATENT-CLASS-165-47		c09 N73-32111	.....	NASA-CASE-ARC-10463-1
		US-PATENT-CLASS-165-96				US-PATENT-APPL-SN-241615
		US-PATENT-CLASS-165-105				US-PATENT-CLASS-331-94.5
		US-PATENT-CLASS-244-1SS				US-PATENT-3,753,148
		US-PATENT-3,749,156		c09 N73-32112	.....	NASA-CASE-ARC-10330-1
c03 N73-31988	.....	NASA-CASE-HSC-12396-1				US-PATENT-APPL-SN-151412
		US-PATENT-APPL-SN-258331				US-PATENT-CLASS-317-235E
		US-PATENT-CLASS-307-18				US-PATENT-CLASS-317-235W
		US-PATENT-CLASS-307-28				US-PATENT-3,760,239
		US-PATENT-CLASS-307-29		c10 N73-32143	.....	NASA-CASE-HSC-13746-1
		US-PATENT-CLASS-307-38				US-PATENT-APPL-SN-226476
		US-PATENT-3,755,686				US-PATENT-CLASS-178-18
c05 N73-32011	.....	NASA-CASE-GSC-11169-2				US-PATENT-3,758,718
		US-PATENT-APPL-SN-60882		c10 N73-32144	.....	NASA-CASE-NPO-11703-1
		US-PATENT-AFEL-SN-139094				US-PATENT-APPL-SN-223560
		US-PATENT-CLASS-195-127				US-PATENT-CLASS-340-166
		US-PATENT-3,756,920				US-PATENT-CLASS-340-173
c05 N73-32012	.....	NASA-CASE-HSC-12609-1				US-PATENT-CLASS-340-223
		US-PATENT-AFEL-SN-750031				US-PATENT-CLASS-340-415
		US-PATENT-CLASS-2-2.1A				US-PATENT-3,760,394
		US-PATENT-CLASS-2-81		c10 N73-32145	.....	NASA-CASE-MFS-21465-1
		US-PATENT-CLASS-128-1A				US-PATENT-APPL-SN-218965
		US-PATENT-3,751,727				US-PATENT-CLASS-307-271
c05 N73-32013	.....	NASA-CASE-MFS-16570-1				US-PATENT-CLASS-318-230
		US-PATENT-AFEL-SN-228150				US-PATENT-CLASS-318-231
		US-PATENT-CLASS-3-1.1				US-PATENT-CLASS-318-341
		US-PATENT-CLASS-3-2				US-PATENT-CLASS-331-135
		US-PATENT-CLASS-3-6				US-PATENT-3,760,248
		US-PATENT-CLASS-3-12		c11 N73-32152	.....	NASA-CASE-HSC-13789-1
		US-PATENT-3,751,733				US-PATENT-APPL-SN-166487
c05 N73-32014	.....	NASA-CASE-HSC-11561-1				US-PATENT-CLASS-89-8
		US-PATENT-AFEL-SN-146940				US-PATENT-CLASS-102-95
		US-PATENT-CLASS-91-186				US-PATENT-CLASS-188-1C
		US-PATENT-CLASS-137-535				US-PATENT-3,763,740
		US-PATENT-CLASS-272-DIG.1		c14 N73-32317	.....	NASA-CASE-NPO-12128-1
		US-PATENT-CLASS-272-DIG.4				US-PATENT-AFEL-SN-841845
		US-PATENT-CLASS-272-DIG.5				US-PATENT-CLASS-250-83.3B
		US-PATENT-CLASS-272-79C				US-PATENT-CLASS-250-207
		US-PATENT-3,758,112				US-PATENT-CLASS-313-104
c05 N73-32015	.....	NASA-CASE-HSC-13436-1				US-PATENT-3,758,781
		US-PATENT-APPL-SN-173190		c14 N73-32318	.....	NASA-CASE-KSC-10730-1
		US-PATENT-CLASS-73-194E				US-PATENT-APPL-SN-248469
		US-PATENT-CLASS-73-194M				US-PATENT-CLASS-324-72
		US-PATENT-CLASS-128-2.07				US-PATENT-3,760,268
		US-PATENT-CLASS-128-2.08		c14 N73-32319	.....	NASA-CASE-KSC-10728-1
		US-PATENT-3,759,249				US-PATENT-APPL-SN-292682
c06 N73-32029	.....	NASA-CASE-NPO-10998-1				US-PATENT-CLASS-95-11
		NASA-CASE-NPO-10999-1				US-PATENT-CLASS-95-11.5
		US-PATENT-APPL-SN-145027				US-PATENT-3,759,152
		US-PATENT-CLASS-252-431N		c14 N73-32320	.....	NASA-CASE-GSC-11188-1
		US-PATENT-CLASS-252-431R				US-PATENT-APPL-SN-80029
		US-PATENT-CLASS-260-470P				US-PATENT-AFEL-SN-244440
		US-PATENT-CLASS-260-93.5A				US-PATENT-CLASS-29-195Y
		US-PATENT-CLASS-260-93.5S				US-PATENT-3,759,672
		US-PATENT-CLASS-260-94.2M		c14 N73-32321	.....	NASA-CASE-IMP-05530
		US-PATENT-CLASS-260-94.2R				NASA-CASE-IMP-06933
		US-PATENT-CLASS-260-94.7R				US-PATENT-APPL-SN-488381
		US-PATENT-CLASS-260-567.6M				US-PATENT-CLASS-73-81
		US-PATENT-3,755,283				US-PATENT-3,379,052
c06 N73-32030	.....	NASA-CASE-MFS-20979-2		c14 N73-32322	.....	NASA-CASE-LAR-10319-1
		US-PATENT-APPL-SN-100774				US-PATENT-AFEL-SN-197870
		US-PATENT-APPL-SN-219590				US-PATENT-CLASS-95-42

ACCESSION NUMBER INDEX

c14 N73-32323 US-PATENT-CLASS-346-110
 US-PATENT-3,757,659
 NASA-CASE-LAR-10440-1
 US-PATENT-APPL-SN-229413
 US-PATENT-CLASS-73-94
 US-PATENT-CLASS-73-103
 US-PATENT-3,757,568
 c14 N73-32324 NASA-CASE-LAR-02743
 US-PATENT-APPL-SN-404212
 US-PATENT-CLASS-313-7
 US-PATENT-3,310,699
 c14 N73-32325 NASA-CASE-XNP-04231
 US-PATENT-APPL-SN-362261
 US-PATENT-CLASS-250-41.9
 US-PATENT-3,334,225
 c14 N73-32326 NASA-CASE-ARC-10362-1
 US-PATENT-APPL-SN-198289
 US-PATENT-CLASS-73-194EM
 US-PATENT-CLASS-128-2.05P
 US-PATENT-3,751,980
 c14 N73-32327 NASA-CASE-LAR-10483-1
 US-PATENT-APPL-SN-184090
 US-PATENT-CLASS-73-12
 US-PATENT-CLASS-73-170R
 US-PATENT-3,763,691
 c15 N73-32358 NASA-CASE-LEW-11388-1
 US-PATENT-APPL-SN-289033
 US-PATENT-CLASS-29-497
 US-PATENT-CLASS-219-91
 US-PATENT-CLASS-219-117
 US-PATENT-3,758,741
 c15 N73-32359 NASA-CASE-LEW-11152-1
 US-PATENT-APPL-SN-198379
 US-PATENT-CLASS-308-9
 US-PATENT-CLASS-308-35
 US-PATENT-3,759,588
 c15 N73-32360 NASA-CASE-GSC-11163-1
 US-PATENT-APPL-SN-205047
 US-PATENT-CLASS-29-527.2
 US-PATENT-CLASS-72-53
 US-PATENT-CLASS-117-66
 US-PATENT-CLASS-117-105
 US-PATENT-CLASS-117-105.5
 US-PATENT-CLASS-117-130R
 US-PATENT-CLASS-117-138.8R
 US-PATENT-CLASS-117-151
 US-PATENT-CLASS-117-160R
 US-PATENT-3,754,976
 c15 N73-32361 NASA-CASE-XNP-01188
 US-PATENT-APPL-SN-155596
 US-PATENT-CLASS-317-158
 US-PATENT-3,262,025
 c15 N73-32362 NASA-CASE-XNP-07169
 US-PATENT-APPL-SN-486884
 US-PATENT-CLASS-175-26
 US-PATENT-3,375,885
 c15 N73-32371 NASA-CASE-LAR-10941-2
 US-PATENT-APPL-SN-395493
 c16 N73-32391 NASA-CASE-GSC-11222-1
 US-PATENT-APPL-SN-251621
 US-PATENT-CLASS-307-157
 US-PATENT-CLASS-315-DIG.2
 US-PATENT-CLASS-315-101
 US-PATENT-CLASS-315-258
 US-PATENT-CLASS-315-356
 US-PATENT-CLASS-330-4.3
 US-PATENT-CLASS-331-94.5
 US-PATENT-3,758,877
 c17 N73-32414 NASA-CASE-LEW-11267-1
 US-PATENT-APPL-SN-190316
 US-PATENT-CLASS-29-196.2
 US-PATENT-CLASS-29-196.6
 US-PATENT-CLASS-29-197
 US-PATENT-3,762,884
 c17 N73-32415 NASA-CASE-LEW-10436-1
 US-PATENT-APPL-SN-221093
 US-PATENT-CLASS-73-170
 US-PATENT-CLASS-75-171
 US-PATENT-3,762,918
 c18 N73-32437 NASA-CASE-BFS-20861-1
 US-PATENT-APPL-SN-160860
 US-PATENT-CLASS-75-135
 US-PATENT-3,752,665
 c22 N73-32528 NASA-CASE-XLE-00209
 US-PATENT-APPL-SN-60276
 US-PATENT-CLASS-176-169
 US-PATENT-3,759,787
 c23 N73-32538 NASA-CASE-LAR-10385-3
 US-PATENT-APPL-SN-370999

c23 N73-32542 NASA-CASE-ARC-10749-1
 US-PATENT-APPL-SN-402866
 c26 N73-32571 NASA-CASE-LEW-11015
 US-PATENT-APPL-SN-235266
 US-PATENT-CLASS-29-599
 US-PATENT-CLASS-174-DIG.6
 US-PATENT-CLASS-174-126CP
 US-PATENT-CLASS-335-116
 US-PATENT-3,763,552
 c28 N73-32606 NASA-CASE-NFO-12070-1
 US-PATENT-APPL-SN-153542
 US-PATENT-CLASS-60-267
 US-PATENT-CLASS-165-105
 US-PATENT-CLASS-165-141
 US-PATENT-CLASS-165-185
 US-PATENT-CLASS-239-127.1
 US-PATENT-3,759,443
 c31 N73-32749 NASA-CASE-ERC-10365-1
 US-PATENT-APPL-SN-99198
 US-PATENT-CLASS-52-64
 US-PATENT-CLASS-52-80
 US-PATENT-CLASS-52-109
 US-PATENT-CLASS-52-646
 US-PATENT-CLASS-287-92
 US-PATENT-3,757,476
 c31 N73-32750 NASA-CASE-LEW-11101-1
 US-PATENT-APPL-SN-175983
 US-PATENT-CLASS-47-1.4
 US-PATENT-CLASS-47-17
 US-PATENT-CLASS-244-1SC
 US-PATENT-CLASS-244-1SS
 US-PATENT-3,749,332
 c33 N73-32818 NASA-CASE-NFO-11942-1
 US-PATENT-APPL-SN-266866
 US-PATENT-CLASS-165-32
 US-PATENT-CLASS-165-96
 US-PATENT-CLASS-165-106
 US-PATENT-CLASS-244-1SS
 US-PATENT-3,763,928
 c06 N73-33076 NASA-CASE-NFO-10767-1
 US-PATENT-APPL-SN-241061
 US-PATENT-APPL-SN-770417
 US-PATENT-CLASS-260-77.5AP
 US-PATENT-3,755,265
 c14 N73-33361 NASA-CASE-ARC-10468-1
 US-PATENT-APPL-SN-288857
 US-PATENT-CLASS-95-12
 US-PATENT-CLASS-355-18
 US-PATENT-3,764,209
 c15 N73-33383 NASA-CASE-LEW-11026-1
 US-PATENT-APPL-SN-196970
 US-PATENT-CLASS-29-487
 US-PATENT-CLASS-29-494
 US-PATENT-CLASS-29-497.5
 US-PATENT-CLASS-29-498
 US-PATENT-3,748,722
 c16 N73-33397 NASA-CASE-ARC-10444-1
 US-PATENT-APPL-SN-167719
 US-PATENT-CLASS-331-94.5A
 US-PATENT-CLASS-350-285
 US-PATENT-CLASS-356-138
 US-PATENT-CLASS-356-148
 US-PATENT-CLASS-356-153
 US-PATENT-CLASS-356-172
 US-PATENT-3,764,220
 c02 N74-10034 NASA-CASE-LAR-10776-1
 US-PATENT-APPL-SN-211332
 US-PATENT-CLASS-244-145
 US-PATENT-3,764,097
 c32 N74-10132 NASA-CASE-NFO-11302-2
 US-PATENT-APPL-SN-70967
 US-PATENT-APPL-SN-266822
 US-PATENT-CLASS-178-69.4R
 US-PATENT-3,766,315
 c33 N74-10194 NASA-CASE-NFO-11962-1
 US-PATENT-APPL-SN-292681
 US-PATENT-CLASS-331-1A
 US-PATENT-CLASS-331-4
 US-PATENT-CLASS-331-14
 US-PATENT-CLASS-331-17
 US-PATENT-CLASS-331-18
 US-PATENT-CLASS-331-178
 US-PATENT-3,764,933
 c33 N74-10195 NASA-CASE-LEW-11617-1
 US-PATENT-APPL-SN-266832
 US-PATENT-CLASS-315-5.35
 US-PATENT-CLASS-315-5.38
 US-PATENT-3,764,850
 c33 N74-10223 NASA-CASE-LAR-10730-1

ACCESSION NUMBER INDEX

	US-PATENT-APPL-SN-239573		US-PATENT-APPL-SN-235962
	US-PATENT-CLASS-235-92CA		US-PATENT-CLASS-333-83B
	US-PATENT-CLASS-235-92DM		US-PATENT-CLASS-333-97B
	US-PATENT-CLASS-235-150.3		US-PATENT-3,771,074
	US-PATENT-CLASS-307-225R	c52 N74-12778	NASA-CASE-MFS-20284-1
	US-PATENT-CLASS-328-48		US-PATENT-APPL-SN-244027
	US-PATENT-3,764,790		US-PATENT-CLASS-128-2.05T
c35 N74-10415	NASA-CASE-MFS-20335-1		US-PATENT-CLASS-128-2.06F
	US-PATENT-APPL-SN-238263		US-PATENT-CLASS-324-78D
	US-PATENT-CLASS-73-67.8S		US-PATENT-CLASS-324-186
	US-PATENT-3,765,229		US-PATENT-3,773,038
c37 N74-10474	NASA-CASE-LEW-10326-3	c54 N74-12779	NASA-CASE-MFS-21115-1
	US-PATENT-APPL-SN-99901		US-PATENT-APPL-SN-266930
	US-PATENT-CLASS-277-25		US-PATENT-CLASS-222-309
	US-PATENT-CLASS-277-27		US-PATENT-CLASS-222-340
	US-PATENT-CLASS-277-96		US-PATENT-CLASS-222-387
	US-PATENT-3,767,212		US-PATENT-CLASS-222-514
c31 N74-10476	NASA-CASE-LEW-10518-3		US-PATENT-3,777,942
	US-PATENT-APPL-SN-394207	c27 N74-12812	NASA-CASE-ABC-10464-1
	NASA-CASE-LEW-10805-3		US-PATENT-APPL-SN-198472
c26 N74-10521	US-PATENT-APPL-SN-29917		US-PATENT-CLASS-260-2.5AH
	US-PATENT-APPL-SN-266928		US-PATENT-3,772,216
	US-PATENT-CLASS-29-420.5	c25 N74-12813	NASA-CASE-LAR-10551-1
	US-PATENT-CLASS-75-200		US-PATENT-APPL-SN-191301
	US-PATENT-CLASS-75-226		US-PATENT-CLASS-23-252B
	US-PATENT-CLASS-148-126		US-PATENT-CLASS-23-281
	US-PATENT-3,765,958		US-PATENT-CLASS-23-288F
c05 N74-10907	NASA-CASE-MXP-02263		US-PATENT-CLASS-23-288J
	US-PATENT-APPL-SN-78766		US-PATENT-CLASS-55-510
	US-PATENT-CLASS-D71-1		US-PATENT-CLASS-55-518
	US-PATENT-DES-228,688		US-PATENT-CLASS-128-191R
c08 N74-10542	NASA-CASE-MSC-12394-1		US-PATENT-CLASS-423-231
	US-PATENT-APPL-SN-341662		US-PATENT-3,771,959
	US-PATENT-CLASS-244-83	c27 N74-12814	NASA-CASE-ABC-10180-1
	US-PATENT-CLASS-318-580		US-PATENT-APPL-SN-13625J
	US-PATENT-CLASS-318-628		US-PATENT-CLASS-260-2.5I
	US-PATENT-3,771,037		US-PATENT-3,772,220
c52 N74-10575	NASA-CASE-MSC-13972-1	c32 N74-12843	NASA-CASE-LAR-11170-1
	US-PATENT-APPL-SN-200040		US-PATENT-APPL-SN-418010
	US-PATENT-CLASS-73-149	c33 N74-12887	NASA-CASE-NPO-11905-1
	US-PATENT-CLASS-128-2S		US-PATENT-APPL-SN-290030
	US-PATENT-3,769,834		US-PATENT-CLASS-178-88
c32 N74-11000	NASA-CASE-NPO-13171-1		US-PATENT-CLASS-325-320
	US-PATENT-APPL-SN-290915		US-PATENT-CLASS-329-104
	US-PATENT-CLASS-343-781		US-PATENT-CLASS-329-122
	US-PATENT-CLASS-343-909		US-PATENT-CLASS-329-126
	US-PATENT-3,769,623		US-PATENT-3,772,272
c33 N74-11049	NASA-CASE-BQN-10792-1	c60 N74-12888	NASA-CASE-MSC-14053-1
	US-PATENT-APPL-SN-245063		US-PATENT-APPL-SN-266899
	US-PATENT-CLASS-321-2		US-PATENT-CLASS-328-123
	US-PATENT-CLASS-321-18		US-PATENT-CLASS-340-173CB
	US-PATENT-CLASS-321-45S		US-PATENT-CLASS-340-173LB
	US-PATENT-CLASS-323-DIG.1		US-PATENT-3,778,786
	US-PATENT-CLASS-331-62	c32 N74-12912	NASA-CASE-NPO-11850-1
	US-PATENT-CLASS-331-113A		US-PATENT-APPL-SN-186700
	US-PATENT-3,771,040		US-PATENT-CLASS-343-6.5B
c33 N74-11050	NASA-CASE-LAR-10868-1		US-PATENT-CLASS-343-6.5SS
	US-PATENT-APPL-SN-253249		US-PATENT-CLASS-343-18B
	US-PATENT-CLASS-137-819		US-PATENT-3,772,691
	US-PATENT-CLASS-137-833	c33 N74-12913	NASA-CASE-LEW-11162-1
	US-PATENT-CLASS-137-840		US-PATENT-APPL-SN-143508
	US-PATENT-3,770,021		US-PATENT-CLASS-313-32
c35 N74-11283	NASA-CASE-NPO-11659-1		US-PATENT-CLASS-313-153
	US-PATENT-APPL-SN-228189		US-PATENT-CLASS-313-209
	US-PATENT-CLASS-178-6.6DD		US-PATENT-CLASS-313-217
	US-PATENT-CLASS-179-100.2MD		US-PATENT-CLASS-313-224
	US-PATENT-CLASS-179-100.2T		US-PATENT-3,777,200
	US-PATENT-CLASS-340-174.1L	c33 N74-12951	NASA-CASE-MFS-21374-1
	US-PATENT-3,770,903		US-PATENT-APPL-SN-238047
c35 N74-11284	NASA-CASE-NPO-11919-1		US-PATENT-CLASS-317-234E
	US-PATENT-APPL-SN-237694		US-PATENT-CLASS-317-234F
	US-PATENT-CLASS-250-343		US-PATENT-CLASS-317-234H
	US-PATENT-3,766,380		US-PATENT-CLASS-317-234N
c37 N74-11300	NASA-CASE-LEW-10533-2		US-PATENT-CLASS-317-234R
	US-PATENT-APPL-SN-247055		US-PATENT-3,778,685
	US-PATENT-CLASS-29-497.5	c46 N74-13011	NASA-CASE-MSC-12408-1
	US-PATENT-CLASS-219-78		US-PATENT-APPL-SN-229916
	US-PATENT-CLASS-219-101		US-PATENT-CLASS-423-579
	US-PATENT-CLASS-219-107		US-PATENT-3,773,913
	US-PATENT-3,770,933	c35 N74-13129	NASA-CASE-FRC-10051-1
c37 N74-11301	NASA-CASE-LAR-10170-1		US-PATENT-APPL-SN-253725
	US-PATENT-APPL-SN-217213		US-PATENT-CLASS-73-86R
	US-PATENT-CLASS-29-460		US-PATENT-CLASS-254-93B
	US-PATENT-CLASS-29-498		US-PATENT-3,776,028
	US-PATENT-CLASS-29-503	c91 N74-13130	NASA-CASE-NPO-12127-1
	US-PATENT-CLASS-29-527.2		US-PATENT-APPL-SN-106106
	US-PATENT-CLASS-117-105.2		US-PATENT-CLASS-250-83CD
	US-PATENT-3,769,689		US-PATENT-CLASS-250-219DF
c36 N74-11313	NASA-CASE-BQN-10790-1		US-PATENT-3,752,996

ACCESSION NUMBER INDEX

c39 N74-13131 NASA-CASE-MPS-20730-1
 US-PATENT-AFEL-SN-182977
 US-PATENT-CLASS-83-452
 US-PATENT-CLASS-83-602
 US-PATENT-CLASS-83-917
 US-PATENT-CLASS-269-48.1
 US-PATENT-3,777,605
 c35 N74-13132 NASA-CASE-LAR-10910-1
 US-PATENT-AFEL-SN-239577
 US-PATENT-CLASS-73-4R
 US-PATENT-CLASS-73-420
 US-PATENT-3,777,546
 c31 N74-13177 NASA-CASE-LAR-10547-1
 US-PATENT-AFEL-SN-193980
 US-PATENT-CLASS-264-294
 US-PATENT-3,772,418
 c27 N74-13178 NASA-CASE-LAR-10544-1
 US-PATENT-AFEL-SN-188928
 US-PATENT-CLASS-222-193
 US-PATENT-3,776,432
 c37 N74-13179 NASA-CASE-LEW-10805-2
 US-PATENT-AFEL-SN-29917
 US-PATENT-AFEL-SN-233743
 US-PATENT-CLASS-29-182
 US-PATENT-CLASS-29-420.5
 US-PATENT-CLASS-75-200
 US-PATENT-CLASS-75-213
 US-PATENT-CLASS-75-214
 US-PATENT-CLASS-75-226
 US-PATENT-3,775,101
 c37 N74-13199 NASA-CASE-LEW-11583-1
 US-PATENT-AFEL-SN-414042
 c36 N74-13205 NASA-CASE-NPO-11317-2
 US-PATENT-AFEL-SN-34989
 US-PATENT-AFEL-SN-187143
 US-PATENT-CLASS-179-100.2CH
 US-PATENT-CLASS-250-205
 US-PATENT-CLASS-250-217
 US-PATENT-CLASS-340-174.1M
 US-PATENT-CLASS-340-174YC
 US-PATENT-CLASS-350-151
 US-PATENT-3,778,791
 c27 N74-13270 NASA-CASE-LEW-11262-1
 US-PATENT-AFEL-SN-136008
 US-PATENT-CLASS-204-192
 US-PATENT-3,772,174
 c04 N74-13420 NASA-CASE-FRC-10049-1
 US-PATENT-AFEL-SN-232021
 US-PATENT-CLASS-235.150.27
 US-PATENT-CLASS-235-150.22
 US-PATENT-CLASS-235-150.26
 US-PATENT-CLASS-244-77A
 US-PATENT-CLASS-244-77B
 US-PATENT-CLASS-343-108R
 US-PATENT-3,776,455
 c70 N74-13436 NASA-CASE-LAR-10385-2
 US-PATENT-AFEL-SN-38816
 US-PATENT-AFEL-SN-239803
 US-PATENT-CLASS-117-33.3
 US-PATENT-CLASS-117-106A
 US-PATENT-3,779,788
 c20 N74-13502 NASA-CASE-LEW-11058-1
 US-PATENT-AFEL-SN-233519
 US-PATENT-CLASS-60-258
 US-PATENT-CLASS-60-259
 US-PATENT-3,777,490
 c31 N74-14133 NASA-CASE-LAR-10782-1
 US-PATENT-AFEL-SN-197689
 US-PATENT-CLASS-264-102
 US-PATENT-3,780,151
 c44 N74-14784 NASA-CASE-LEW-11069-1
 US-PATENT-AFEL-SN-83816
 US-PATENT-CLASS-29-572
 US-PATENT-CLASS-29-588
 US-PATENT-CLASS-136-89
 US-PATENT-3,780,424
 c54 N74-14845 NASA-CASE-LAR-10241-1
 US-PATENT-AFEL-SN-193672
 US-PATENT-CLASS-9-11A
 US-PATENT-3,781,933
 c62 N74-14920 NASA-CASE-MSC-13932-1
 US-PATENT-AFEL-SN-229354
 US-PATENT-CLASS-235-153AK
 US-PATENT-3,783,250
 c33 N74-14935 NASA-CASE-MPS-21462-1
 US-PATENT-AFEL-SN-239576
 US-PATENT-CLASS-219-477
 US-PATENT-CLASS-219-539
 US-PATENT-CLASS-338-320

US-PATENT-3,732,397
 c33 N74-14939 NASA-CASE-FRC-10072-1
 US-PATENT-AFEL-SN-162100
 US-PATENT-CLASS-330-9
 US-PATENT-CLASS-330-10
 US-PATENT-CLASS-330-35
 US-PATENT-3,783,399
 c33 N74-14941 NASA-CASE-ABC-10364-2(B)
 US-PATENT-AFEL-SN-433968
 c33 N74-14956 NASA-CASE-MSC-17832-1
 US-PATENT-AFEL-SN-293727
 US-PATENT-CLASS-307-127
 US-PATENT-CLASS-317-335C
 US-PATENT-CLASS-317-43
 US-PATENT-CLASS-317-46
 US-PATENT-CLASS-317-47
 US-PATENT-CLASS-317-48
 US-PATENT-3,783,354
 c19 N74-15089 NASA-CASE-LAR-10586-1
 US-PATENT-AFEL-SN-289049
 US-PATENT-CLASS-162-70.2R
 US-PATENT-CLASS-244-15A
 US-PATENT-CLASS-244-3.16
 US-PATENT-CLASS-250-203R
 US-PATENT-CLASS-250-237R
 US-PATENT-3,780,566
 c35 N74-15090 NASA-CASE-NPO-11432-2
 US-PATENT-AFEL-SN-88435
 US-PATENT-AFEL-SN-258152
 US-PATENT-CLASS-250-211J
 US-PATENT-CLASS-250-214
 US-PATENT-CLASS-317-235N
 US-PATENT-3,781,549
 c35 N74-15091 NASA-CASE-LAR-11155-1
 US-PATENT-AFEL-SN-313381
 US-PATENT-CLASS-250-360
 US-PATENT-CLASS-250-361
 US-PATENT-CLASS-250-369
 US-PATENT-CLASS-250-492
 US-PATENT-3,781,562
 c35 N74-15092 NASA-CASE-LAR-10862-1
 US-PATENT-AFEL-SN-271951
 US-PATENT-CLASS-73-34V
 US-PATENT-3,780,563
 c35 N74-15093 NASA-CASE-ARC-10442-1
 US-PATENT-AFEL-SN-280032
 US-PATENT-CLASS-62-45
 US-PATENT-CLASS-165-2
 US-PATENT-CLASS-165-109
 US-PATENT-CLASS-259-DIG.18
 US-PATENT-CLASS-259-60
 US-PATENT-3,782,698
 c35 N74-15094 NASA-CASE-NPO-13044-1
 US-PATENT-AFEL-SN-305012
 US-PATENT-CLASS-73-497
 US-PATENT-CLASS-73-517B
 US-PATENT-CLASS-74-5.6
 US-PATENT-3,782,205
 c74 N74-15095 NASA-CASE-MSC-14096-1
 US-PATENT-AFEL-SN-242662
 US-PATENT-CLASS-350-7
 US-PATENT-CLASS-350-236
 US-PATENT-CLASS-350-285
 US-PATENT-CLASS-356-43
 US-PATENT-CLASS-356-216
 US-PATENT-3,782,835
 c37 N74-15125 NASA-CASE-XLE-10326-4
 US-PATENT-AFEL-SN-54540
 US-PATENT-AFEL-SN-220251
 US-PATENT-AFEL-SN-723465
 US-PATENT-CLASS-277-27
 US-PATENT-CLASS-277-91
 US-PATENT-3,782,737
 c35 N74-15126 NASA-CASE-ABC-10441-1
 US-PATENT-AFEL-SN-280029
 US-PATENT-CLASS-259-98
 US-PATENT-CLASS-417-470
 US-PATENT-CLASS-417-471
 US-PATENT-3,782,699
 c35 N74-15127 NASA-CASE-NFO-11682-1
 US-PATENT-AFEL-SN-187365
 US-PATENT-CLASS-23-284
 US-PATENT-3,782,904
 c37 N74-15128 NASA-CASE-LEW-11087-2
 US-PATENT-AFEL-SN-201904
 US-PATENT-AFEL-SN-280390
 US-PATENT-CLASS-29-144.4A
 US-PATENT-CLASS-29-148.4B
 US-PATENT-3,781,958

ACCESSION NUMBER INDEX

c39 N74-13131	NASA-CASE-MFS-20730-1 US-PATENT-AEFL-SN-182977 US-PATENT-CLASS-83-452 US-PATENT-CLASS-83-602 US-PATENT-CLASS-83-917 US-PATENT-CLASS-269-48.1 US-PATENT-3,777,605	c33 N74-14939	US-PATENT-3,732,397 NASA-CASE-PBC-10072-1 US-PATENT-AEFL-SN-162100 US-PATENT-CLASS-330-9 US-PATENT-CLASS-330-10 US-PATENT-CLASS-330-35 US-PATENT-3,782,399
c35 N74-13132	NASA-CASE-LAR-10910-1 US-PATENT-AEFL-SN-239577 US-PATENT-CLASS-73-4R US-PATENT-CLASS-73-420 US-PATENT-3,777,546	c33 N74-14941	NASA-CASE-ABC-10364-2(B) US-PATENT-AEFL-SN-433968
c31 N74-13177	NASA-CASE-LAR-10547-1 US-PATENT-AEFL-SN-193980 US-PATENT-CLASS-264-294 US-PATENT-3,772,418	c33 N74-14956	NASA-CASE-HSC-17832-1 US-PATENT-AEFL-SN-293727 US-PATENT-CLASS-307-127 US-PATENT-CLASS-317-3JSC US-PATENT-CLASS-317-43 US-PATENT-CLASS-317-46 US-PATENT-CLASS-317-47 US-PATENT-CLASS-317-48 US-PATENT-3,783,354
c27 N74-13178	NASA-CASE-LAR-10544-1 US-PATENT-AEFL-SN-188928 US-PATENT-CLASS-222-193 US-PATENT-3,776,432	c19 N74-15089	NASA-CASE-LAF-10586-1 US-PATENT-AEFL-SN-289049 US-PATENT-CLASS-112-70.2R US-PATENT-CLASS-244-15A US-PATENT-CLASS-244-3.16 US-PATENT-CLASS-250-203R US-PATENT-CLASS-250-237R US-PATENT-3,780,566
c37 N74-13179	NASA-CASE-LEW-10805-2 US-PATENT-AEFL-SN-29917 US-PATENT-AEFL-SN-233743 US-PATENT-CLASS-29-182 US-PATENT-CLASS-29-420.5 US-PATENT-CLASS-75-200 US-PATENT-CLASS-75-213 US-PATENT-CLASS-75-214 US-PATENT-CLASS-75-226 US-PATENT-3,775,101	c35 N74-15090	NASA-CASE-NPO-11432-2 US-PATENT-AEFL-SN-88435 US-PATENT-AEFL-SN-256152 US-PATENT-CLASS-250-211J US-PATENT-CLASS-250-214 US-PATENT-CLASS-317-235N US-PATENT-3,781,549
c37 N74-13199	NASA-CASE-LEW-11583-1 US-PATENT-AEFL-SN-414042	c35 N74-15091	NASA-CASE-LAR-11155-1 US-PATENT-AEFL-SN-313381 US-PATENT-CLASS-250-360 US-PATENT-CLASS-250-361 US-PATENT-CLASS-250-369 US-PATENT-CLASS-250-492 US-PATENT-3,781,562
c36 N74-13205	NASA-CASE-NPO-11317-2 US-PATENT-AEFL-SN-34989 US-PATENT-AEFL-SN-187143 US-PATENT-CLASS-179-100.2CH US-PATENT-CLASS-250-205 US-PATENT-CLASS-250-217 US-PATENT-CLASS-340-174.1M US-PATENT-CLASS-340-174YC US-PATENT-CLASS-350-151 US-PATENT-3,778,791	c35 N74-15092	NASA-CASE-LAR-10862-1 US-PATENT-AEFL-SN-271951 US-PATENT-CLASS-73-4V US-PATENT-3,780,563
c27 N74-13270	NASA-CASE-LEW-11262-1 US-PATENT-AEFL-SN-136008 US-PATENT-CLASS-204-192 US-PATENT-3,772,174	c35 N74-15093	NASA-CASE-ABC-10442-1 US-PATENT-AEFL-SN-280032 US-PATENT-CLASS-62-45 US-PATENT-CLASS-165-2 US-PATENT-CLASS-165-109 US-PATENT-CLASS-259-DIG.18 US-PATENT-CLASS-259-60 US-PATENT-3,782,698
c04 N74-13420	NASA-CASE-FRC-10049-1 US-PATENT-AEFL-SN-232021 US-PATENT-CLASS-235.150.27 US-PATENT-CLASS-235.150.22 US-PATENT-CLASS-235.150.26 US-PATENT-CLASS-244-77A US-PATENT-CLASS-244-77B US-PATENT-CLASS-343-108R US-PATENT-3,776,455	c35 N74-15094	NASA-CASE-NPO-13044-1 US-PATENT-AEFL-SN-305012 US-PATENT-CLASS-73-497 US-PATENT-CLASS-73-517B US-PATENT-CLASS-74-5.6 US-PATENT-3,782,205
c70 N74-13436	NASA-CASE-LAR-10385-2 US-PATENT-AEFL-SN-38816 US-PATENT-AEFL-SN-239803 US-PATENT-CLASS-117-33.3 US-PATENT-CLASS-117-106A US-PATENT-3,779,788	c74 N74-15095	NASA-CASE-HSC-14096-1 US-PATENT-AEFL-SN-242662 US-PATENT-CLASS-350-7 US-PATENT-CLASS-350-236 US-PATENT-CLASS-350-285 US-PATENT-CLASS-356-43 US-PATENT-CLASS-356-216 US-PATENT-3,782,835
c20 N74-13502	NASA-CASE-LEW-11058-1 US-PATENT-AEFL-SN-233519 US-PATENT-CLASS-60-258 US-PATENT-CLASS-60-259 US-PATENT-3,777,490	c37 N74-15125	NASA-CASE-XLE-10326-4 US-PATENT-AEFL-SN-54540 US-PATENT-AEFL-SN-220251 US-PATENT-AEFL-SN-723465 US-PATENT-CLASS-277-27 US-PATENT-CLASS-277-93 US-PATENT-3,782,737
c31 N74-14133	NASA-CASE-LAR-10782-1 US-PATENT-AEFL-SN-197689 US-PATENT-CLASS-264-102 US-PATENT-3,780,151	c35 N74-15126	NASA-CASE-ABC-10441-1 US-PATENT-AEFL-SN-280029 US-PATENT-CLASS-259-98 US-PATENT-CLASS-417-470 US-PATENT-CLASS-417-471 US-PATENT-3,782,699
c44 N74-14784	NASA-CASE-LEW-11069-1 US-PATENT-AEFL-SN-83816 US-PATENT-CLASS-29-572 US-PATENT-CLASS-29-588 US-PATENT-CLASS-136-89 US-PATENT-3,780,424	c35 N74-15127	NASA-CASE-NPO-11682-1 US-PATENT-AEFL-SN-187365 US-PATENT-CLASS-23-284 US-PATENT-3,782,904
c54 N74-14845	NASA-CASE-LAR-10241-1 US-PATENT-AEFL-SN-193672 US-PATENT-CLASS-9-11A US-PATENT-3,781,933	c37 N74-15128	NASA-CASE-LEW-11087-2 US-PATENT-AEFL-SN-201904 US-PATENT-AEFL-SN-280390 US-PATENT-CLASS-29-148.4A US-PATENT-CLASS-29-148.4B US-PATENT-3,781,958
c62 N74-14520	NASA-CASE-HSC-13932-1 US-PATENT-AEFL-SN-229354 US-PATENT-CLASS-235-153AK US-PATENT-3,783,250		
c33 N74-14535	NASA-CASE-MFS-21462-1 US-PATENT-AEFL-SN-239576 US-PATENT-CLASS-219-477 US-PATENT-CLASS-219-539 US-PATENT-CLASS-338-320		

ACCESSION NUMBER INDEX

c18 N74-15130	NASA-CASE-NFS-20767-1 US-PATENT-AFEL-SN-196898 US-PATENT-CLASS-73-67.88 US-PATENT-3,777,552		US-PATENT-CLASS-100-8 US-PATENT-CLASS-336-410 US-PATENT-3,792,399
c36 N74-15145	NASA-CASE-NPO-11856-1 US-PATENT-AFEL-SN-235268 US-PATENT-CLASS-250-21788 US-PATENT-CLASS-331-94.5K US-PATENT-CLASS-331-94.58 US-PATENT-CLASS-350-6 US-PATENT-CLASS-356-4 US-PATENT-CLASS-356-5 US-PATENT-CLASS-356-152 US-PATENT-3,781,111	c33 N74-17929	NASA-CASE-ARC-10197-1 US-PATENT-APPL-SN-310624 US-PATENT-CLASS-317-16 US-PATENT-CLASS-317-31 US-PATENT-3,795,846
c35 N74-15146	NASA-CASE-NFS-21455-1 US-PATENT-AFEL-SN-281877 US-PATENT-CLASS-73-71.3 US-PATENT-CLASS-350-3.5 US-PATENT-CLASS-356-106 US-PATENT-3,782,825	c33 N74-17930	NASA-CASE-NUC-10107-1 US-PATENT-APPL-SN-201700 US-PATENT-CLASS-324-102 US-PATENT-CLASS-324-118 US-PATENT-CLASS-329-50 US-PATENT-3,795,862
c38 N74-15395	NASA-CASE-NFS-21233-1 US-PATENT-AFEL-SN-246056 US-PATENT-CLASS-73-67.5R US-PATENT-CLASS-73-71.50 US-PATENT-CLASS-324-40 US-PATENT-3,782,177	c09 N74-17955	NASA-CASE-LAR-10812-1 US-PATENT-APPL-SN-263815 US-PATENT-CLASS-73-147 US-PATENT-3,791,207
c07 N74-15453	NASA-CASE-LEW-11569-1 US-PATENT-AFEL-SN-3166.8 US-PATENT-CLASS-181-43 US-PATENT-3,780,827	c35 N74-18088	NASA-CASE-LAR-11027-1 US-PATENT-APPL-SN-275118 US-PATENT-CLASS-250-338 US-PATENT-CLASS-250-370 US-PATENT-CLASS-250-371 US-PATENT-3,790,795
c34 N74-15652	NASA-CASE-LAR-10105-1 US-PATENT-AFEL-SN-170680 US-PATENT-CLASS-73-86 US-PATENT-3,782,181	c31 N74-18089	NASA-CASE-LAR-10318-1 US-PATENT-APPL-SN-224489 US-PATENT-CLASS-156-245 US-PATENT-CLASS-156-247 US-PATENT-CLASS-156-285 US-PATENT-CLASS-156-309 US-PATENT-3,793,109
c51 N74-15778	NASA-CASE-ARC-10302-1 US-PATENT-AFEL-SN-203271 US-PATENT-CLASS-119-51.5 US-PATENT-CLASS-119-51.13 US-PATENT-CLASS-119-51R US-PATENT-CLASS-119-52AP US-PATENT-CLASS-119-54 US-PATENT-CLASS-221-265 US-PATENT-3,782,334	c35 N74-18090	NASA-CASE-NPO-13160-1 US-PATENT-APPL-SN-359157 US-PATENT-CLASS-321-8R US-PATENT-CLASS-324-57R US-PATENT-3,795,858
c35 N74-15831	NASA-CASE-GSC-11553-1 US-PATENT-AFEL-SN-177985 US-PATENT-CLASS-34-162 US-PATENT-CLASS-95-89R US-PATENT-CLASS-178-6.7R US-PATENT-CLASS-219-216 US-PATENT-CLASS-219-388 US-PATENT-CLASS-346-24 US-PATENT-CLASS-346-108 US-PATENT-CLASS-346-138 US-PATENT-3,781,902	c37 N74-18123	NASA-CASE-LAR-10634-1 US-PATENT-APPL-SN-214084 US-PATENT-CLASS-23-253EC US-PATENT-CLASS-23-259 US-PATENT-CLASS-259-72 US-PATENT-CLASS-312-209 US-PATENT-CLASS-356-85 US-PATENT-CLASS-356-197 US-PATENT-3,790,347
c35 N74-16135	NASA-CASE-LAR-10595-1 US-PATENT-AFEL-SN-273240 US-PATENT-CLASS-340-5R US-PATENT-CLASS-340-8R US-PATENT-CLASS-340-12R US-PATENT-3,783,443	c31 N74-18124	NASA-CASE-LAR-10489-1 US-PATENT-AFEL-SN-198763 US-PATENT-CLASS-264-102 US-PATENT-3,790,650
c35 N74-17153	NASA-CASE-NFS-21087-1 US-PATENT-AFEL-SN-149283 US-PATENT-CLASS-350-3.5 US-PATENT-3,752,556	c37 N74-18125	NASA-CASE-NFS-21309-1 US-PATENT-APPL-SN-244519 US-PATENT-CLASS-180-79.3 US-PATENT-CLASS-301-5P US-PATENT-3,789,947
c27 N74-17283	NASA-CASE-NFS-20486-2 US-PATENT-APPL-SN-84212 US-PATENT-APPL-SN-292382 US-PATENT-CLASS-260-29.6S US-PATENT-3,784,499	c37 N74-18126	NASA-CASE-NFS-21364-1 US-PATENT-APPL-SN-214006 US-PATENT-CLASS-156-331 US-PATENT-CLASS-161-42 US-PATENT-CLASS-161-43 US-PATENT-CLASS-161-93 US-PATENT-CLASS-161-162 US-PATENT-CLASS-161-192 US-PATENT-CLASS-260-2R US-PATENT-CLASS-264-135 US-PATENT-CLASS-264-136 US-PATENT-CLASS-264-257 US-PATENT-3,790,432
c54 N74-17853	NASA-CASE-NFS-21163-1 US-PATENT-APPL-SN-266925 US-PATENT-CLASS-222-324 US-PATENT-CLASS-224-444 US-PATENT-3,790,037	c37 N74-18127	NASA-CASE-NFS-21481-1 US-PATENT-APPL-SN-266771 US-PATENT-CLASS-74-594.6 US-PATENT-CLASS-74-594.7 US-PATENT-CLASS-128-25R US-PATENT-CLASS-274-73 US-PATENT-CLASS-272-80 US-PATENT-3,788,163
c35 N74-17885	NASA-CASE-NFS-13855-1 US-PATENT-APPL-SN-196931 US-PATENT-CLASS-325-38B US-PATENT-CLASS-332-11D US-PATENT-CLASS-340-347AD US-PATENT-3,795,900	c37 N74-18128	NASA-CASE-LFW-11387-1 US-PATENT-APPL-SN-247090 US-PATENT-CLASS-29-482 US-PATENT-CLASS-29-488 US-PATENT-CLASS-29-497 US-PATENT-CLASS-29-498 US-PATENT-3,781,959
c33 N74-17527	NASA-CASE-NPO-13138-1 US-PATENT-AFEL-SN-335201 US-PATENT-CLASS-328-155 US-PATENT-CLASS-333-16 US-PATENT-CLASS-333-18 US-PATENT-3,790,906	c35 N74-18323	NASA-CASE-NFS-21136-1 US-PATENT-AFEL-SN-262430 US-PATENT-CLASS-74-5.7 US-PATENT-CLASS-308-10 US-PATENT-3,763,106
c33 N74-17528	NASA-CASE-NPO-11966-1 NASA-CASE-NPO-13159-1 US-PATENT-AFEL-SN-284245	c25 N74-18551	NASA-CASE-LAR-11052-1 US-PATENT-AFEL-SN-281615

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-73-15R		US-PATENT-3,802,253
	US-PATENT-3,789,654	c52 N74-20728	NASA-CASE-HPS-21415-1
c34 N74-18552	NASA-CASE-NPO-11120-1		US-PATENT-APPL-SN-318152
	US-PATENT-APPL-SN-39343		US-PATENT-CLASS-73-23
	US-PATENT-CLASS-29-157.3R		US-PATENT-CLASS-73-421.5R
	US-PATENT-CLASS-165-105		US-PATENT-CLASS-128-2.07
	US-PATENT-CLASS-267-166		US-PATENT-CLASS-128-2.08
	US-PATENT-3,789,920		US-PATENT-3,799,149
c72 N74-19310	NASA-CASE-HQN-10740-1	c32 N74-20809	NASA-CASE-HSC-12462-1
	US-PATENT-APPL-SN-266943		US-PATENT-APPL-SN-274360
	US-PATENT-CLASS-356-28		US-PATENT-CLASS-178-88
	US-PATENT-CLASS-356-106R		US-PATENT-CLASS-325-320
	US-PATENT-CLASS-356-112		US-PATENT-CLASS-325-423
	US-PATENT-3,795,448		US-PATENT-3,800,227
c09 N74-19528	NASA-CASE-LAR-10426-1	c32 N74-20810	NASA-CASE-HSC-12494-1
	US-PATENT-APPL-SN-239575		US-PATENT-APPL-SN-304705
	US-PATENT-CLASS-73-15.6		US-PATENT-CLASS-325-321
	US-PATENT-CLASS-73-91		US-PATENT-CLASS-325-419
	US-PATENT-3,795,134		US-PATENT-3,806,816
c44 N74-19692	NASA-CASE-GSC-11367-1	c32 N74-20811	NASA-CASE-NPC-13103-1
	US-PATENT-APPL-SN-236985		US-PATENT-APPL-SN-338484
	US-PATENT-CLASS-136-36		US-PATENT-CLASS-325-320
	US-PATENT-3,759,747		US-PATENT-CLASS-325-419
c44 N74-19693	NASA-CASE-NPO-11806-1		US-PATENT-CLASS-329-122
	US-PATENT-APPL-SN-228163		US-PATENT-3,806,815
	US-PATENT-CLASS-136-20	c32 N74-20813	NASA-CASE-FRC-10071-1
	US-PATENT-CLASS-136-30		US-PATENT-APPL-SN-307727
	US-PATENT-3,790,409		US-PATENT-CLASS-178-7.7
c24 N74-19769	NASA-CASE-ERC-10073-1		US-PATENT-CLASS-315-18
	US-PATENT-APPL-SN-856253		US-PATENT-CLASS-315-22
	US-PATENT-CLASS-117-95		US-PATENT-3,803,445
	US-PATENT-3,796,592	c60 N74-20836	NASA-CASE-ERC-10180-1
c27 N74-19772	NASA-CASE-LAR-11372-1		US-PATENT-APPL-SN-858278
	US-PATENT-APPL-SN-448321		US-PATENT-CLASS-235-164
c32 N74-19788	NASA-CASE-NPO-11820-1		US-PATENT-3,803,393
	US-PATENT-APPL-SN-266912	c33 N74-20859	NASA-CASE-XLE-2529-3
	US-PATENT-CLASS-307-237		US-PATENT-APPL-SN-288856
	US-PATENT-CLASS-328-160		US-PATENT-APPL-SN-487929
	US-PATENT-CLASS-328-168		US-PATENT-APPL-SN-848403
	US-PATENT-CLASS-328-172		US-PATENT-CLASS-315-211
	US-PATENT-CLASS-333-14		US-PATENT-CLASS-315-228
	US-PATENT-3,800,237		US-PATENT-CLASS-331-94.5D
c32 N74-19790	NASA-CASE-HPS-21540-1		US-PATENT-CLASS-333-7.51
	US-PATENT-APPL-SN-333912		US-PATENT-3,806,835
	US-PATENT-CLASS-178-7.1	c33 N74-20860	NASA-CASE-GSC-11446-1
	US-PATENT-CLASS-325-148		US-PATENT-APPL-SN-263230
	US-PATENT-3,800,224		US-PATENT-CLASS-343-DIG.2
c44 N74-19870	NASA-CASE-HPS-21470-1		US-PATENT-CLASS-343-10USA
	US-PATENT-APPL-SN-340871		US-PATENT-CLASS-343-10UST
	US-PATENT-CLASS-325-62		US-PATENT-CLASS-343-854
	US-PATENT-CLASS-333-17		US-PATENT-3,806,942
	US-PATENT-CLASS-343-7.5	c33 N74-20861	NASA-CASE-GSC-11560-1
	US-PATENT-CLASS-343-17.7		US-PATENT-APPL-SN-361906
	US-PATENT-3,795,910		US-PATENT-CLASS-95-5.2EA
c74 N74-20008	NASA-CASE-GSC-11188-3		US-PATENT-CLASS-350-269
	US-PATENT-APPL-SN-80029		US-PATENT-CLASS-354-234
	US-PATENT-APPL-SN-244566		US-PATENT-3,804,506
	US-PATENT-CLASS-117-45	c33 N74-20862	NASA-CASE-GSC-11513-1
	US-PATENT-3,799,793		US-PATENT-APPL-SN-15069
c36 N74-20009	NASA-CASE-NPO-11861-1		US-PATENT-CLASS-331-108A
	US-PATENT-APPL-SN-266911		US-PATENT-CLASS-331-115
	US-PATENT-CLASS-178-DIG.1		US-PATENT-CLASS-331-116R
	US-PATENT-CLASS-178-6		US-PATENT-CLASS-331-159
	US-PATENT-CLASS-178-7.6		US-PATENT-3,806,831
	US-PATENT-3,800,074	c32 N74-20863	NASA-CASE-GSC-11909
c37 N74-20063	NASA-CASE-LAR-10129-2		US-PATENT-APPL-SN-244158
	US-PATENT-APPL-SN-99201		US-PATENT-CLASS-343-73C
	US-PATENT-APPL-SN-319410		US-PATENT-CLASS-343-786
	US-PATENT-CLASS-312-1		US-PATENT-CLASS-343-797
	US-PATENT-3,796,473		US-PATENT-CLASS-343-853
c76 N74-20329	NASA-CASE-GSC-11425-1		US-PATENT-3,803,617
	US-PATENT-APPL-SN-206266	c32 N74-20864	NASA-CASE-GSC-11428-1
	US-PATENT-CLASS-148-1.5		US-PATENT-APPL-SN-292685
	US-PATENT-3,799,813		US-PATENT-CLASS-343-708
c02 N74-20646	NASA-CASE-LEW-11188-1		US-PATENT-CLASS-343-769
	US-PATENT-APPL-SN-152328		US-PATENT-CLASS-343-853
	US-PATENT-CLASS-137-15.1		US-PATENT-3,805,266
	US-PATENT-CLASS-137-15.2	c71 N74-21014	NASA-CASE-HQN-10834-1
	US-PATENT-CLASS-244-53B		US-PATENT-APPL-SN-301417
	US-PATENT-3,799,475		US-PATENT-CLASS-35-35A
c54 N74-20725	NASA-CASE-HPS-22102-1		US-PATENT-CLASS-178-DIG.32
	US-PATENT-APPL-SN-341621		US-PATENT-CLASS-178-5.8R
	US-PATENT-CLASS-4-10		US-PATENT-CLASS-178-7.2
	US-PATENT-CLASS-4-120		US-PATENT-CLASS-340-407
	US-PATENT-3,805,303		US-PATENT-3,800,082
c52 N74-20726	NASA-CASE-ARC-10597-1	c19 N74-21015	NASA-CASE-LAR-10626-1
	US-PATENT-APPL-SN-281876		US-PATENT-APPL-SN-202750
	US-PATENT-CLASS-73-67.9		US-PATENT-CLASS-33-15A
	US-PATENT-CLASS-128-2V		US-PATENT-CLASS-33-46R

ACCESSION NUMBER INDEX

c35 N74-21017	US-PATENT-3,798,778 NASA-CASE-MFS-21660-1 US-PATENT-APPL-SN-310616 US-PATENT-CLASS-324-830 US-PATENT-3,806,802	c74 N74-21304	US-PATENT-CLASS-354-234 US-PATENT-3,797,919 NASA-CASE-GSC-11453-1 US-PATENT-APPL-SN-260241 US-PATENT-CLASS-250-2315E US-PATENT-CLASS-350-299 US-PATENT-CLASS-356-152 US-PATENT-3,802,779
c35 N74-21018	NASA-CASE-IEW-10981-1 US-PATENT-APPL-SN-214089 US-PATENT-CLASS-73-194EM US-PATENT-CLASS-310-11 US-PATENT-CLASS-324-34FL US-PATENT-3,802,262	c33 N74-21850	NASA-CASE-GSC-11602-1 US-PATENT-APPL-SN-298157 US-PATENT-CLASS-315-10 US-PATENT-CLASS-315-11 US-PATENT-CLASS-315-12 US-PATENT-3,806,756
c35 N74-21019	NASA-CASE-GSC-11600-1 US-PATENT-APPL-SN-318357 US-PATENT-CLASS-73-1F US-PATENT-3,802,249	c33 N74-21851	NASA-CASE-ARC-10596-1 US-PATENT-APPL-SN-267862 US-PATENT-CLASS-330-28 US-PATENT-CLASS-330-59 US-PATENT-3,811,094
c37 N74-21055	NASA-CASE-IEW-11388-2 US-PATENT-APPL-SN-289033 US-PATENT-APPL-SN-293726 US-PATENT-CLASS-29-487 US-PATENT-CLASS-29-494 US-PATENT-CLASS-29-498 US-PATENT-CLASS-29-504 US-PATENT-3,798,748	c35 N74-22095	NASA-CASE-MPC-10617-1 US-PATENT-APPL-SN-828920 US-PATENT-CLASS-73-190H US-PATENT-3,648,516
c37 N74-21056	NASA-CASE-LAR-10688-1 US-PATENT-APPL-SN-285705 US-PATENT-CLASS-235-92FE US-PATENT-CLASS-235-92SE US-PATENT-CLASS-235-151 US-PATENT-3,800,253	c32 N74-22096	NASA-CASE-XLE-04791 US-PATENT-APPL-SN-582213 US-PATENT-CLASS-330-103 US-PATENT-3,404,348
c37 N74-21057	NASA-CASE-LAR-10941-1 US-PATENT-APPL-SN-289048 US-PATENT-CLASS-29-470.1 US-PATENT-3,797,098	c18 N74-22136	NASA-CASE-MFS-20922-1 US-PATENT-APPL-SN-220274 US-PATENT-CLASS-49-68 US-PATENT-CLASS-61-83 US-PATENT-CLASS-244-15S US-PATENT-3,807,656
c37 N74-21058	NASA-CASE-MFS-22411-1 US-PATENT-APPL-SN-382262 US-PATENT-CLASS-260-448.2N US-PATENT-3,801,617	c52 N74-22771	NASA-CASE-ARC-10447-1 US-PATENT-APPL-SN-311175 US-PATENT-CLASS-128-214E US-PATENT-CLASS-235-151.3 US-PATENT-3,809,871
c31 N74-21059	NASA-CASE-LAR-10409-1 US-PATENT-APPL-SN-340864 US-PATENT-CLASS-29-423 US-PATENT-3,798,741	c33 N74-22814	NASA-CASE-NPO-13081-1 US-PATENT-APPL-SN-345372 US-PATENT-CLASS-307-215 US-PATENT-CLASS-307-243 US-PATENT-CLASS-307-290 US-PATENT-CLASS-328-154 US-PATENT-3,808,464
c37 N74-21060	NASA-CASE-NPO-13105-1 US-PATENT-APPL-SN-283502 US-PATENT-CLASS-60-25 US-PATENT-3,798,896	c33 N74-22864	NASA-CASE-XER-11046-2 US-PATENT-APPL-SN-87597 US-PATENT-APPL-SN-810579 US-PATENT-CLASS-321-45B US-PATENT-3,808,511
c37 N74-21061	NASA-CASE-IEW-11076-1 US-PATENT-APPL-SN-238264 US-PATENT-CLASS-308-73 US-PATENT-3,804,472	c33 N74-22865	NASA-CASE-LAR-10168-1 US-PATENT-APPL-SN-354407 US-PATENT-CLASS-174-DIG.8 US-PATENT-CLASS-174-69 US-PATENT-CLASS-174-70R US-PATENT-CLASS-244-15TR US-PATENT-3,809,800
c35 N74-21062	NASA-CASE-LAR-10295-1 US-PATENT-APPL-SN-221685 US-PATENT-CLASS-73-12 US-PATENT-CLASS-73-432 US-PATENT-3,805,622	c33 N74-22885	NASA-CASE-MFS-21671-1 US-PATENT-APPL-SN-329958 US-PATENT-CLASS-323-106 US-PATENT-CLASS-323-122 US-PATENT-CLASS-323-128 US-PATENT-3,808,517
c37 N74-21063	NASA-CASE-IEW-10698-1 US-PATENT-APPL-SN-30498 US-PATENT-CLASS-65-DIG.11 US-PATENT-CLASS-106-52 US-PATENT-CLASS-117-129 US-PATENT-CLASS-161-196 US-PATENT-3,804,703	c34 N74-23039	NASA-CASE-GSC-11620-1 US-PATENT-APPL-SN-280305 US-PATENT-CLASS-126-270 US-PATENT-CLASS-244-31 US-PATENT-CLASS-244-127 US-PATENT-3,807,384
c37 N74-21064	NASA-CASE-IEW-11087-3 US-PATENT-APPL-SN-201904 US-PATENT-APPL-SN-346361 US-PATENT-CLASS-308-188 US-PATENT-CLASS-308-191 US-PATENT-3,802,753	c35 N74-23040	NASA-CASE-NPO-11932-1 NASA-CASE-NPO-13127-1 US-PATENT-APPL-SN-311234 US-PATENT-CLASS-356-113 US-PATENT-CLASS-356-1065 US-PATENT-3,809,481
c37 N74-21065	NASA-CASE-NPO-11951-1 US-PATENT-APPL-SN-287150 US-PATENT-CLASS-137-628 US-PATENT-CLASS-251-120 US-PATENT-CLASS-251-122 US-PATENT-CLASS-251-210 US-PATENT-3,802,660	c37 N74-23064	NASA-CASE-LAR-10900-1 US-PATENT-APPL-SN-290021 US-PATENT-CLASS-161-116 US-PATENT-3,809,601
c36 N74-21091	NASA-CASE-GSC-11262-1 US-PATENT-APPL-SN-162380 US-PATENT-CLASS-33-285 US-PATENT-CLASS-250-204 US-PATENT-CLASS-356-141 US-PATENT-CLASS-356-152 US-PATENT-CLASS-356-172 US-PATENT-3,804,525	c31 N74-23065	NASA-CASE-NPO-11758-1 US-PATENT-APPL-SN-266913 US-PATENT-CLASS-204-222 US-PATENT-3,810,829
c27 N74-21156	NASA-CASE-ARC-10592-1 US-PATENT-APPL-SN-321179 US-PATENT-CLASS-260.46.5E US-PATENT-3,803,090	c34 N74-23066	NASA-CASE-LAR-10089-1 US-PATENT-APPL-SN-305638 US-PATENT-CLASS-240-47 US-PATENT-CLASS-353-54 US-PATENT-CLASS-353-61 US-PATENT-3,811,044
c70 N74-21200	NASA-CASE-ARC-10516-1 US-PATENT-APPL-SN-267768 US-PATENT-CLASS-350-270		

ACCESSION NUMBER INDEX

c46 N74-23068	NASA-CASE-INP-10007-1 US-PATENT-AFII-SN-611414 US-PATENT-AFII-SN-768942 US-PATENT-CLASS-299-67 US-PATENT-3,606,470	c37 N74-26976	NASA-CASE-MFS-21846-1 US-PATENT-AFII-SN-359958 US-PATENT-CLASS-188-163 US-PATENT-CLASS-188-171 US-PATENT-3,812,936
c46 N74-23069	NASA-CASE-INP-09755 US-PATENT-AFII-SN-611414 US-PATENT-AFII-SN-857241 US-PATENT-CLASS-51-283 US-PATENT-CLASS-125-1 US-PATENT-CLASS-125-3 US-PATENT-CLASS-299-86 US-PATENT-3,612,030	c33 N74-26977	NASA-CASE-MFS-22133-1 US-PATENT-AFII-SN-337487 US-PATENT-CLASS-29-2038W US-PATENT-3,815,405
c37 N74-23070	NASA-CASE-MFS-20645-1 US-PATENT-AFII-SN-103091 US-PATENT-CLASS-74-217R US-PATENT-3,678,771	c24 N74-27035	NASA-CASE-ILA-11028-1 US-PATENT-APPL-SN-219435 US-PATENT-CLASS-156-285 US-PATENT-3,814,653
c27 N74-23125	NASA-CASE-IEW-10199-1 US-PATENT-AFII-SN-651972 US-PATENT-CLASS-117-126GR US-PATENT-CLASS-117-132B US-PATENT-CLASS-117-161UN US-PATENT-CLASS-260-781P US-PATENT-3,647,529	c27 N74-27037	NASA-CASE-ARC-10304-2 US-PATENT-AFII-SN-140946 US-PATENT-AFII-SN-318358 US-PATENT-CLASS-102-105 US-PATENT-CLASS-106-15FP US-PATENT-CLASS-252-8.1 US-PATENT-CLASS-252-62 US-PATENT-CLASS-260-DIG.24 US-PATENT-CLASS-260-2.5FP US-PATENT-CLASS-260-2.5B US-PATENT-CLASS-260-2R US-PATENT-CLASS-260-396N US-PATENT-3,819,550
c37 N74-25968	NASA-CASE-MFS-21485-1 US-PATENT-AFII-SN-277436 US-PATENT-CLASS-90-12.5 US-PATENT-CLASS-408-80 US-PATENT-CLASS-408-111 US-PATENT-3,813,183	c15 N74-27360	NASA-CASE-LAR-10670-2 US-PATENT-APPL-SN-59892 US-PATENT-AFII-SN-248761 US-PATENT-CLASS-60-39.46 US-PATENT-CLASS-60-214 US-PATENT-CLASS-60-215 US-PATENT-CLASS-102-90 US-PATENT-3,813,875
c52 N74-26625	NASA-CASE-NPO-13065-1 US-PATENT-APPL-SN-269073 US-PATENT-CLASS-128-2.1A US-PATENT-CLASS-325-113 US-PATENT-CLASS-325-141 US-PATENT-CLASS-340-183 US-PATENT-CLASS-340-203 US-PATENT-CLASS-340-207P US-PATENT-3,815,109	c18 N74-27397	NASA-CASE-MFS-21680-1 NASA-CASE-MFS-21681-1 US-PATENT-AFII-SN-343607 US-PATENT-CLASS-244-1SS US-PATENT-CLASS-248-16 US-PATENT-CLASS-248-2J US-PATENT-3,814,350
c52 N74-26626	NASA-CASE-MSC-13999-1 US-PATENT-AFII-SN-256317 US-PATENT-CLASS-128-2.05A US-PATENT-CLASS-128-2.05B US-PATENT-3,814,083	c28 N74-27425	NASA-CASE-MFC-11743-1 US-PATENT-AFII-SN-277904 US-PATENT-CLASS-102-20EB US-PATENT-CLASS-102-70.2A US-PATENT-CLASS-102-70-2B US-PATENT-3,812,783
c32 N74-26654	NASA-CASE-MSC-14065-1 US-PATENT-AFII-SN-297128 US-PATENT-CLASS-178-67 US-PATENT-CLASS-325-30 US-PATENT-3,816,657	c07 N74-27490	NASA-CASE-LEW-11286-1 US-PATENT-AFII-SN-339806 US-PATENT-CLASS-181-33BB US-PATENT-CLASS-239-265.17 US-PATENT-3,820,630
c33 N74-26732	NASA-CASE-MFS-21698-1 US-PATENT-AFII-SN-37050 US-PATENT-CLASS-331-109 US-PATENT-CLASS-331-117R US-PATENT-CLASS-331-183 US-PATENT-3,815,048	c44 N74-27519	NASA-CASE-MFS-20761-1 US-PATENT-AFII-SN-326327 US-PATENT-CLASS-136-182 US-PATENT-CLASS-324-29.5 US-PATENT-CLASS-324-72.5 US-PATENT-3,818,325
c73 N74-26767	NASA-CASE-NPO-13112-1 US-PATENT-AFII-SN-267572 US-PATENT-CLASS-250-499 US-PATENT-CLASS-313-61S US-PATENT-3,816,785	c52 N74-27566	NASA-CASE-GSC-11531-1 US-PATENT-AFII-SN-291845 US-PATENT-CLASS-73-398AB US-PATENT-CLASS-128-2.05B US-PATENT-3,811,429
c35 N74-26945	NASA-CASE-MFS-21556-1 US-PATENT-AFII-SN-340791 US-PATENT-CLASS-73-141A US-PATENT-CLASS-177-200 US-PATENT-CLASS-177-211 US-PATENT-CLASS-177-246 US-PATENT-3,812,924	c32 N74-27612	NASA-CASE-MSC-14219-1 US-PATENT-AFII-SN-324029 US-PATENT-CLASS-117-2B US-PATENT-CLASS-156-94 US-PATENT-CLASS-175-100.2A US-PATENT-CLASS-175-100.2B US-PATENT-CLASS-264-36 US-PATENT-3,819,440
c35 N74-26946	NASA-CASE-MFS-22040-1 US-PATENT-AFII-SN-365644 US-PATENT-CLASS-96-38.3 US-PATENT-CLASS-96-79 US-PATENT-CLASS-350-3.5 US-PATENT-3,815,969	c33 N74-27682	NASA-CASE-ARC-10593-1 US-PATENT-AFII-SN-310193 US-PATENT-CLASS-250-207 US-PATENT-CLASS-307-252L US-PATENT-CLASS-307-252Q US-PATENT-3,821,546
c25 N74-26947	NASA-CASE-ARC-10633-1 US-PATENT-AFII-SN-354611 US-PATENT-CLASS-250-304 US-PATENT-CLASS-250-343 US-PATENT-CLASS-250-373 US-PATENT-3,814,939	c33 N74-27683	NASA-CASE-LEW-10950-1 US-PATENT-AFII-SN-273222 US-PATENT-CLASS-174-15C US-PATENT-CLASS-174-28 US-PATENT-CLASS-174-111 US-PATENT-CLASS-310-4B US-PATENT-3,821,462
c25 N74-26948	NASA-CASE-MFS-21395-1 US-PATENT-AFII-SN-260093 US-PATENT-CLASS-204-180R US-PATENT-3,814,678	c33 N74-27705	NASA-CASE-MSC-14066-1 US-PATENT-AFII-SN-297127 US-PATENT-CLASS-178-88 US-PATENT-CLASS-325-320 US-PATENT-3,818,346
c35 N74-26949	NASA-CASE-GSC-11492-1 US-PATENT-AFII-SN-372148 US-PATENT-CLASS-250-374 US-PATENT-CLASS-250-385 US-PATENT-CLASS-313-93 US-PATENT-3,812,358		

ACCESSION NUMBER INDEX

c34 N74-27730	NASA-CASE-HFS-21424-1 US-PATENT-APPL-SN-315048 US-PATENT-CLASS-73-3 US-PATENT-CLASS-73-147 US-PATENT-3,817,082	US-PATENT-CLASS-416-223 US-PATENT-CLASS-416-237 US-PATENT-3,820,918 NASA-CASE-HFS-21577-1 US-PATENT-APPL-SN-343308 US-PATENT-CLASS-250-372 US-PATENT-CLASS-250-394 US-PATENT-3,825,760	
c34 N74-27744	NASA-CASE-HFS-21394-1 US-PATENT-APPL-SN-258171 US-PATENT-CLASS-204-180R US-PATENT-CLASS-204-299 US-PATENT-3,821,102	NASA-CASE-KSC-10769-1 US-PATENT-APPL-SN-374583 US-PATENT-CLASS-318-602 US-PATENT-CLASS-318-603 US-PATENT-CLASS-318-664 US-PATENT-3,826,964	
c34 N74-27859	NASA-CASE-GSC-11434-1 US-PATENT-APPL-SN-263498 US-PATENT-CLASS-73-190R US-PATENT-3,813,937	NASA-CASE-LAR-10416-1 US-PATENT-APPL-SN-251752 US-PATENT-CLASS-156-94 US-PATENT-3,814,645	
c35 N74-27860	NASA-CASE-MSC-14081-1 US-PATENT-APPL-SN-331760 US-PATENT-CLASS-250-576 US-PATENT-CLASS-356-180 US-PATENT-CLASS-356-246 US-PATENT-3,817,627	c24 N74-30001	NASA-CASE-LAR-11206-1 US-PATENT-APPL-SN-491413 NASA-CASE-ARC-10598-1 US-PATENT-APPL-SN-318151 US-PATENT-CLASS-356-43 US-PATENT-CLASS-356-73 US-PATENT-CLASS-356-85 US-PATENT-CLASS-356-87 US-PATENT-CLASS-356-201 US-PATENT-3,817,622
c34 N74-27861	NASA-CASE-HFS-21108-1 US-PATENT-APPL-SN-307728 US-PATENT-CLASS-136-213 US-PATENT-CLASS-136-230 US-PATENT-CLASS-136-233 US-PATENT-3,819,419	c74 N74-30118	NASA-CASE-LAR-10753-1 US-PATENT-APPL-SN-289018 US-PATENT-CLASS-244-90R US-PATENT-CLASS-244-91 US-PATENT-CLASS-244-327 US-PATENT-3,826,446
c33 N74-27862	NASA-CASE-KSC-10731-1 US-PATENT-APPL-SN-288847 US-PATENT-CLASS-73-170R US-PATENT-CLASS-324-72 US-PATENT-CLASS-340-151 US-PATENT-CLASS-340-182 US-PATENT-CLASS-340-200 US-PATENT-3,820,095	c75 N74-30156	NASA-CASE-NEO-13482-1 US-PATENT-APPL-SN-495021 NASA-CASE-LEW-10906-1 US-PATENT-APPL-SN-245279 US-PATENT-APPL-SN-876588 US-PATENT-CLASS-204-157.1H US-PATENT-3,826,726
c52 N74-27864	NASA-CASE-HFS-21049-1 US-PATENT-APPL-SN-304430 US-PATENT-CLASS-73-88.5R US-PATENT-CLASS-128-2S US-PATENT-CLASS-338-5 US-PATENT-CLASS-338-114 US-PATENT-3,820,529	c44 N74-30448	NASA-CASE-NFO-11921-1 US-PATENT-APPL-SN-359039 US-PATENT-CLASS-179-15BC US-PATENT-CLASS-145-346 US-PATENT-3,828,138
c35 N74-27865	NASA-CASE-HFS-21728-1 US-PATENT-APPL-SN-361907 US-PATENT-CLASS-73-141A US-PATENT-3,820,388	c25 N74-30502	NASA-CASE-MSC-13912-1 US-PATENT-APPL-SN-310034 US-PATENT-CLASS-179-15A1 US-PATENT-CLASS-179-15B1 US-PATENT-3,828,137
c74 N74-27866	NASA-CASE-HFS-21372-1 US-PATENT-APPL-SN-226477 US-PATENT-CLASS-250-505 US-PATENT-CLASS-250-511 US-PATENT-3,821,556	c32 N74-30523	NASA-CASE-LAR-10550-1 US-PATENT-APPL-SN-261183 US-PATENT-CLASS-35-12E US-PATENT-3,824,707
c06 N74-27872	NASA-CASE-ARC-10806 US-PATENT-APPL-SN-478802	c32 N74-30524	NASA-CASE-LAR-10194-1 US-PATENT-APPL-SN-169962 US-PATENT-CLASS-55-43 US-PATENT-CLASS-55-159 US-PATENT-CLASS-55-199 US-PATENT-3,828,524
c31 N74-27900	NASA-CASE-LAR-10841-1 US-PATENT-APPL-SN-307729 US-PATENT-CLASS-13-31 US-PATENT-CLASS-73-15R US-PATENT-3,817,084	c09 N74-30597	NASA-CASE-GSC-11569-1 US-PATENT-APPL-SN-293725 US-PATENT-CLASS-33-26R US-PATENT-CLASS-250-20JR US-PATENT-CLASS-356-141 US-PATENT-CLASS-356-147 US-PATENT-3,821,807
c37 N74-27901	NASA-CASE-ARC-10462-1 US-PATENT-APPL-SN-310615 US-PATENT-CLASS-74-675 US-PATENT-CLASS-74-710 US-PATENT-3,818,775	c34 N74-30608	NASA-CASE-NFC-11623-1 US-PATENT-APPL-SN-235338 US-PATENT-CLASS-73-69 US-PATENT-CLASS-73-71.5R US-PATENT-CLASS-181.5R US-PATENT-3,827,288
c31 N74-27902	NASA-CASE-GSC-11445-1 US-PATENT-APPL-SN-248471 US-PATENT-CLASS-98-39 US-PATENT-CLASS-236-49 US-PATENT-3,818,874	c20 N74-31269	NASA-CASE-LEW-11646-1 US-PATENT-APPL-SN-294686 US-PATENT-CLASS-204-192 US-PATENT-3,826,729
c37 N74-27903	NASA-CASE-MSC-12549-1 US-PATENT-APPL-SN-301039 US-PATENT-CLASS-244-1SD US-PATENT-3,820,741	c07 N74-31270	NASA-CASE-LAR-10642-1 US-PATENT-APPL-SN-266820 US-PATENT-CLASS-137-15.1 US-PATENT-CLASS-415-181 US-PATENT-3,829,231
c37 N74-27904	NASA-CASE-LEW-11672-1 US-PATENT-APPL-SN-305639 US-PATENT-CLASS-417-52 US-PATENT-3,819,299	c07 N74-32418	NASA-CASE-LAR-11141-1 US-PATENT-APPL-SN-359957 US-PATENT-CLASS-181-33C US-PATENT-CLASS-181-33F US-PATENT-CLASS-181-33H US-PATENT-CLASS-181-33I
c37 N74-27905	NASA-CASE-LAR-10450-1 US-PATENT-APPL-SN-289017 US-PATENT-CLASS-51-97R US-PATENT-CLASS-51-225 US-PATENT-CLASS-51-234 US-PATENT-3,820,286		
c35 N74-28097	NASA-CASE-GSC-11479-1 US-PATENT-APPL-SN-293739 US-PATENT-CLASS-74-5.5 US-PATENT-CLASS-244-15A US-PATENT-3,818,767		
c07 N74-28226	NASA-CASE-LEW-11602-1 US-PATENT-APPL-SN-219806 US-PATENT-CLASS-415-181		

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-181-42		US-PATENT-J,830,431
	US-PATENT-3,830,335	c25 N74-33378	NASA-CASE-NFS-41675-1
c54 N74-32546	NASA-CASE-MSC-11072		US-PATENT-APPL-SN-392823
	US-PATENT-AFEL-SN-689455		US-PATENT-CLASS-23-217C
	US-PATENT-CLASS-2-2,1A		US-PATENT-CLASS-431-202
	US-PATENT-CLASS-2-82		US-PATENT-3,833,336
	US-PATENT-CLASS-156-218	c44 N74-33379	NASA-CASE-ARC-10461-1
	US-PATENT-3,832,735		US-PATENT-APPL-SN-336319
c32 N74-32598	NASA-CASE-MSC-14070-1		US-PATENT-CLASS-60-527
	US-PATENT-APPL-SN-266940		US-PATENT-J,820,060
	US-PATENT-CLASS-340-146.1A	c27 N74-34579	NASA-CASE-LEW-12053-1
	US-PATENT-3,831,142		US-PATENT-APPL-SN-513613
c32 N74-32601	NASA-CASE-MSC-12616-1	c33 N74-34638	NASA-CASE-NFS-22343-1
	US-PATENT-APPL-SN-493360		US-PATENT-APPL-SN-329237
c33 N74-32660	NASA-CASE-GSC-11617-1		US-PATENT-CLASS-307-18
	US-PATENT-APPL-SN-402865		US-PATENT-CLASS-307-35
	US-PATENT-CLASS-330-4.9		US-PATENT-CLASS-307-295
	US-PATENT-CLASS-330-53		US-PATENT-CLASS-307-304
	US-PATENT-3,833,857		US-PATENT-3,840,829
c33 N74-32711	NASA-CASE-MSC-14130-1	c85 N74-34672	NASA-CASE-LAR-10256-1
	US-PATENT-APPL-SN-373587		US-PATENT-APPL-SN-220785
	US-PATENT-CLASS-307-267		US-PATENT-CLASS-104-23FS
	US-PATENT-CLASS-328-58		US-PATENT-CLASS-104-138R
	US-PATENT-3,831,098		US-PATENT-CLASS-238-144
c33 N74-32712	NASA-CASE-NPO-11948-1		US-PATENT-J,837,285
	US-PATENT-APPL-SN-306652	c35 N74-34857	NASA-CASE-LAR-11428-1
	US-PATENT-CLASS-307-230		US-PATENT-APPL-SN-188836
	US-PATENT-CLASS-330-69		US-PATENT-APPL-SN-357126
	US-PATENT-CLASS-333-80R		US-PATENT-CLASS-250-281
	US-PATENT-3,831,117		US-PATENT-CLASS-250-295
c35 N74-32877	NASA-CASE-LAR-10806-1		US-PATENT-J,835,318
	US-PATENT-APPL-SN-322998	c34 N74-34881	NASA-CASE-LAR-11522-1
	US-PATENT-CLASS-33-1M		US-PATENT-APPL-SN-513689
	US-PATENT-CLASS-338-89	c25 N75-12086	NASA-CASE-ARC-10469-1
	US-PATENT-CLASS-340-347AD		US-PATENT-APPL-SN-281908
	US-PATENT-CLASS-346-33R		US-PATENT-CLASS-195-103.5R
	US-PATENT-3,832,781		US-PATENT-3,846,243
c35 N74-32878	NASA-CASE-LAR-11139-1	c25 N75-12087	NASA-CASE-ARC-10643-1
	US-PATENT-APPL-SN-287149		US-PATENT-APPL-SN-513389
	US-PATENT-CLASS-73-182		US-PATENT-CLASS-117-93.1GD
	US-PATENT-CLASS-73-388		US-PATENT-CLASS-117-1610A
	US-PATENT-3,832,903		US-PATENT-CLASS-117-1610H
c35 N74-32879	NASA-CASE-MSC-14187-1		US-PATENT-CLASS-117-1610Z
	US-PATENT-APPL-SN-326326		US-PATENT-CLASS-204-177
	US-PATENT-CLASS-23-230L		US-PATENT-CLASS-210-500
	US-PATENT-CLASS-73-15.4		US-PATENT-CLASS-264-22
	US-PATENT-CLASS-73-40.7		US-PATENT-CLASS-264-217
	US-PATENT-CLASS-73-104		US-PATENT-3,847,652
c31 N74-32917	US-PATENT-3,830,094	c31 N75-12161	NASA-CASE-NFS-20775-1
	NASA-CASE-NPO-13205-1		US-PATENT-APPL-SN-356664
	US-PATENT-APPL-SN-393525		US-PATENT-CLASS-118-49.1
	US-PATENT-CLASS-425-28B		US-PATENT-3,847,115
	US-PATENT-CLASS-425-35	c34 N75-12222	NASA-CASE-GSC-11619-1
	US-PATENT-3,833,322		US-PATENT-APPL-SN-397476
c37 N74-32918	NASA-CASE-NPO-13157-1		US-PATENT-CLASS-138-113
	US-PATENT-APPL-SN-370872		US-PATENT-CLASS-138-114
	US-PATENT-CLASS-29-203H		US-PATENT-CLASS-138-148
	US-PATENT-CLASS-29-268		US-PATENT-CLASS-165-1
	US-PATENT-3,832,764		US-PATENT-CLASS-165-47
c20 N74-32919	NASA-CASE-LEW-11118-1		US-PATENT-CLASS-165-105
	US-PATENT-APPL-SN-289050		US-PATENT-CLASS-220-15
	US-PATENT-CLASS-204-9		US-PATENT-CLASS-244-15C
	US-PATENT-3,832,290		US-PATENT-3,847,208
c31 N74-32920	NASA-CASE-LAR-10489-2	c35 N75-12270	NASA-CASE-MSC-10750-1
	US-PATENT-APPL-SN-198763		US-PATENT-APPL-SN-346372
	US-PATENT-APPL-SN-350300		US-PATENT-CLASS-324-60C
	US-PATENT-CLASS-249-83		US-PATENT-CLASS-324-158T
	US-PATENT-CLASS-249-95		US-PATENT-J,848,190
	US-PATENT-CLASS-249-145	c35 N75-12271	NASA-CASE-NFS-20994-1
	US-PATENT-CLASS-249-184		US-PATENT-APPL-SN-386789
	US-PATENT-CLASS-425-128		US-PATENT-CLASS-73-67.1
	US-PATENT-CLASS-425-415		US-PATENT-CLASS-128-2V
	US-PATENT-3,830,609		US-PATENT-J,847,141
c37 N74-32921	NASA-CASE-LEW-11076-2	c35 N75-12272	NASA-CASE-LAR-11069-1
	US-PATENT-APPL-SN-238264		US-PATENT-APPL-SN-326198
	US-PATENT-APPL-SN-346483		US-PATENT-CLASS-195-127
	US-PATENT-CLASS-308-121		US-PATENT-3,841,973
	US-PATENT-3,830,552	c35 N75-12273	NASA-CASE-NFS-20506-1
c28 N74-33209	NASA-CASE-NPO-11975-1		US-PATENT-APPL-SN-328792
	US-PATENT-APPL-SN-329243		US-PATENT-CLASS-33-DIG.13
	US-PATENT-CLASS-149-17		US-PATENT-CLASS-33-180R
	US-PATENT-CLASS-149-60		US-PATENT-CLASS-350-292
	US-PATENT-CLASS-149-76		US-PATENT-3,842,509
	US-PATENT-3,830,673	c37 N75-12326	NASA-CASE-LAR-11211-1
c07 N74-33218	NASA-CASE-ARC-10712-1		US-PATENT-APPL-SN-302681
	US-PATENT-APPL-SN-344410		US-PATENT-CLASS-29-470.1
	US-PATENT-CLASS-181-33HC		US-PATENT-CLASS-29-475
	US-PATENT-CLASS-239-265.11		US-PATENT-3,842,485
		c54 N75-12616	NASA-CASE-NFS-21611-1

ACCESSION NUMBER INDEX

	US-PATENT-APPL-SN-403694	c37 N75-13266	NASA-CASE-NPO-13281-1
	US-PATENT-CLASS-214-1CM		US-PATENT-APPL-SN-412079
	US-PATENT-CLASS-307-149		US-PATENT-CLASS-74-436
	US-PATENT-CLASS-308-174		US-PATENT-CLASS-74-820
	US-PATENT-3,849,668		US-PATENT-3,855,873
c74 N75-12732	NASA-CASE-ARC-10448-2	c37 N75-13268	NASA-CASE-LAR-11643-1
	US-PATENT-APPL-SN-374424		US-PATENT-APPL-SN-531649
	US-PATENT-CLASS-156-7	c51 N75-13502	NASA-CASE-LAR-11074-1
	US-PATENT-CLASS-156-16		US-PATENT-APPL-SN-326364
	US-PATENT-CLASS-156-18		US-PATENT-CLASS-115-103.5
	US-PATENT-CLASS-250-495		US-PATENT-CLASS-195-120
	US-PATENT-3,847,689		US-PATENT-CLASS-195-127
c76 N75-12810	NASA-CASE-LAR-11059-1		US-PATENT-3,850,754
	US-PATENT-APPL-SN-367294	c51 N75-13506	NASA-CASE-ARC-10643-2
	US-PATENT-CLASS-73-32R		US-PATENT-APPL-SN-521619
	US-PATENT-CLASS-73-432PS	c54 N75-13531	NASA-CASE-LAW-11581-1
	US-PATENT-3,842,656		US-PATENT-APPL-SN-327927
c05 N75-12930	NASA-CASE-ARC-10456-1		US-PATENT-CLASS-128-2.05A
	US-PATENT-APPL-SN-237491		US-PATENT-CLASS-128-2.05P
	US-PATENT-CLASS-74-480R		US-PATENT-3,850,169
	US-PATENT-CLASS-244-75R	c60 N75-13539	NASA-CASE-ARC-10466-1
	US-PATENT-CLASS-244-83R		US-PATENT-APPL-SN-352382
	US-PATENT-CLASS-416-25		US-PATENT-CLASS-235-156
	US-PATENT-3,850,388		US-PATENT-CLASS-235-197
c09 N75-12968	NASA-CASE-MFS-22039-1		US-PATENT-CLASS-324-77B
	US-PATENT-APPL-SN-386790		US-PATENT-3,851,162
	US-PATENT-CLASS-108-136	c75 N75-13625	NASA-CASE-MFS-22145-1
	US-PATENT-3,853,075		US-PATENT-APPL-SN-367606
c09 N75-12969	NASA-CASE-ARC-10710-1		US-PATENT-CLASS-176-3
	US-PATENT-APPL-SN-379019		US-PATENT-CLASS-313-63
	US-PATENT-CLASS-73-147		US-PATENT-CLASS-315-111
	US-PATENT-3,853,003		US-PATENT-CLASS-328-233
c15 N75-13007	NASA-CASE-GSC-11182-1		US-PATENT-3,854,097
	US-PATENT-APPL-SN-393527	c23 N75-14834	NASA-CASE-HSC-13530-2
	US-PATENT-CLASS-325-4		US-PATENT-APPL-SN-69488
	US-PATENT-3,851,250		US-PATENT-APPL-SN-178771
c24 N75-13032	NASA-CASE-LAR-10994-1		US-PATENT-CLASS-106-13
	US-PATENT-APPL-SN-390466		US-PATENT-CLASS-106-15R
	US-PATENT-CLASS-29-420		US-PATENT-CLASS-106-287SE
	US-PATENT-CLASS-29-604		US-PATENT-CLASS-117-124F
	US-PATENT-CLASS-75-200		US-PATENT-CLASS-117-145.5
	US-PATENT-CLASS-340-174HA		US-PATENT-CLASS-252-70
	US-PATENT-3,849,877		US-PATENT-CLASS-252-549
c25 N75-13054	NASA-CASE-LAR-11302-1		US-PATENT-3,856,534
	US-PATENT-APPL-SN-521007	c24 N75-14839	NASA-CASE-LAW-11484-2
	NASA-CASE-LAR-10782-2		US-PATENT-APPL-SN-53156E
c31 N75-13111	US-PATENT-APPL-SN-197689	c25 N75-14844	NASA-CASE-NPO-12130-1
	US-PATENT-APPL-SN-379049		US-PATENT-APPL-SN-750235
	US-PATENT-CLASS-249-59		US-PATENT-CLASS-23-230B
	US-PATENT-CLASS-249-144		US-PATENT-CLASS-23-253E
	US-PATENT-CLASS-249-145		US-PATENT-3,856,471
	US-PATENT-CLASS-425-DIG.43	c33 N75-14957	NASA-CASE-HSC-14240-1
	US-PATENT-CLASS-425-405R		US-PATENT-APPL-SN-351929
	US-PATENT-CLASS-425-438		US-PATENT-CLASS-307-205
	US-PATENT-CLASS-425-468		US-PATENT-CLASS-307-208
	US-PATENT-3,850,567		US-PATENT-3,857,045
c33 N75-13139	NASA-CASE-MFS-22073-1	c35 N75-15014	NASA-CASE-LAR-11213-1
	US-PATENT-APPL-SN-409991		US-PATENT-APPL-SN-406715
	US-PATENT-CLASS-318-608		US-PATENT-CLASS-250-201
	US-PATENT-CLASS-318-640		US-PATENT-CLASS-356-4
	US-PATENT-CLASS-318-649		US-PATENT-3,857,031
	US-PATENT-CLASS-318-675	c36 N75-15028	NASA-CASE-MFS-21244-1
	US-PATENT-3,851,238		US-PATENT-APPL-SN-350249
c35 N75-13213	NASA-CASE-LAW-11632-2		US-PATENT-CLASS-356-5
	US-PATENT-APPL-SN-254173		US-PATENT-CLASS-356-28
	US-PATENT-APPL-SN-327969		US-PATENT-CLASS-356-10J
	US-PATENT-CLASS-29-571		US-PATENT-3,856,402
	US-PATENT-CLASS-29-592	c36 N75-15029	NASA-CASE-NPO-13050-1
	US-PATENT-CLASS-307-309		US-PATENT-APPL-SN-317567
	US-PATENT-CLASS-317-235H		US-PATENT-CLASS-117-95
	US-PATENT-CLASS-330-6		US-PATENT-CLASS-117-97
	US-PATENT-3,849,875		US-PATENT-CLASS-330-4
			US-PATENT-CLASS-332-7.5
c37 N75-13261	NASA-CASE-LAW-11696-1		US-PATENT-3,859,119
	US-PATENT-APPL-SN-298156	c37 N75-15050	NASA-CASE-NPO-13201-1
	US-PATENT-CLASS-29-196.6		US-PATENT-APPL-SN-372149
	US-PATENT-CLASS-29-197		US-PATENT-CLASS-74-424.8VA
	US-PATENT-CLASS-29-460		US-PATENT-CLASS-137-505.38
	US-PATENT-CLASS-29-494		US-PATENT-CLASS-137-505.42
	US-PATENT-CLASS-29-497.5		US-PATENT-3,856,042
	US-PATENT-CLASS-29-504	c52 N75-15270	NASA-CASE-NPO-12119-1
	US-PATENT-3,849,865		US-PATENT-APPL-SN-847815
			US-PATENT-CLASS-424-180
c37 N75-13265	NASA-CASE-HSC-10723-1		US-PATENT-3,849,554
	US-PATENT-APPL-SN-347952	c09 N75-15662	NASA-CASE-LAR-10276-1
	US-PATENT-CLASS-338-75		US-PATENT-APPL-SN-29979
	US-PATENT-CLASS-338-97		US-PATENT-CLASS-35-12C
	US-PATENT-CLASS-338-162		US-PATENT-CLASS-272-1B
	US-PATENT-3,854,113		US-PATENT-CLASS-272-57A

ACCESSION NUMBER INDEX

c32 N75-15E54	US-PATENT-3,859,736 NASA-CASE-NPO-13292-1 US-PATENT-APPL-SN-416135 US-PATENT-CLASS-343-6-58 US-PATENT-CLASS-343-9 US-PATENT-CLASS-343-17-5 US-PATENT-CLASS-343-100ST US-PATENT-3,860,921	c33 N75-19516	NASA-CASE-GSC-11760-1 NASA-CASE-GSC-11783-1 US-PATENT-APPL-SN-395868 US-PATENT-CLASS-343-761 US-PATENT-CLASS-343-781 US-PATENT-CLASS-343-837 US-PATENT-3,866,233
c33 N75-15E74	NASA-CASE-MFS-22088-1 US-PATENT-APPL-SN-426155 US-PATENT-CLASS-318-227 US-PATENT-CLASS-318-230 US-PATENT-CLASS-318-231 US-PATENT-3,860,858	c33 N75-19517	NASA-CASE-GSC-11582-1 US-PATENT-APPL-SN-397477 US-PATENT-CLASS-178-15 US-PATENT-CLASS-315-18 US-PATENT-CLASS-340-324AD US-PATENT-3,866,210
c35 N75-15931	NASA-CASE-MFS-21761-1 US-PATENT-APPL-SN-337816 US-PATENT-CLASS-73-40 US-PATENT-CLASS-73-49-2 US-PATENT-CLASS-200-83N US-PATENT-3,859,845	c33 N75-19518	NASA-CASE-ARC-10348-1 US-PATENT-APPL-SN-140439 US-PATENT-CLASS-330-69 US-PATENT-CLASS-330-86 US-PATENT-3,872,395
c35 N75-15932	NASA-CASE-MFS-21045-1 US-PATENT-APPL-SN-411572 US-PATENT-CLASS-73-1R US-PATENT-CLASS-73-379 US-PATENT-3,859,840	c33 N75-19519	NASA-CASE-NPO-13125-1 US-PATENT-APPL-SN-319150 US-PATENT-CLASS-235-92DM US-PATENT-CLASS-235-92LG US-PATENT-CLASS-235-92R US-PATENT-CLASS-235-92T US-PATENT-CLASS-235-92VA US-PATENT-3,866,022
c36 N75-15573	NASA-CASE-NPO-13532-1 US-PATENT-APPL-SN-537473	c33 N75-19520	NASA-CASE-ARC-10364-3 US-PATENT-APPL-SN-209618 US-PATENT-APPL-SN-462844 US-PATENT-CLASS-307-321 US-PATENT-CLASS-324-DIG.1 US-PATENT-CLASS-329-166 US-PATENT-CLASS-329-204 US-PATENT-CLASS-332-47 US-PATENT-3,869,676
c37 N75-15592	NASA-CASE-GSC-11577-1 US-PATENT-APPL-SN-322997 US-PATENT-CLASS-29-472.7 US-PATENT-CLASS-29-473.1 US-PATENT-CLASS-65-43 US-PATENT-CLASS-117-93.3 US-PATENT-CLASS-117-106A US-PATENT-CLASS-156-89 US-PATENT-CLASS-156-99 US-PATENT-3,859,714	c33 N75-19521	NASA-CASE-KSC-10736-1 US-PATENT-APPL-SN-348787 US-PATENT-CLASS-324-102 US-PATENT-CLASS-324-113 US-PATENT-3,869,667
c24 N75-16635	NASA-CASE-MSC-12662-1 US-PATENT-APPL-SN-540779	c33 N75-19522	NASA-CASE-GSC-11844-1 US-PATENT-APPL-SN-452761 US-PATENT-CLASS-307-227 US-PATENT-CLASS-321-15 US-PATENT-CLASS-324-32 US-PATENT-3,869,659
c35 N75-16783	NASA-CASE-ARC-10637-1 US-PATENT-APPL-SN-352383 US-PATENT-CLASS-356-28 US-PATENT-3,860,342	c33 N75-19524	NASA-CASE-NPO-13374-1 US-PATENT-APPL-SN-449118 US-PATENT-CLASS-318-137 US-PATENT-CLASS-318-167 US-PATENT-CLASS-318-176 US-PATENT-CLASS-318-183 US-PATENT-3,867,677
c20 N75-18310	NASA-CASE-LEW-11694-1 US-PATENT-APPL-SN-352381 US-PATENT-CLASS-29-25.18 US-PATENT-CLASS-72-63 US-PATENT-3,864,797	c34 N75-19579	NASA-CASE-LEW-12252-1 US-PATENT-APPL-SN-559847
c33 N75-18477	NASA-CASE-MFS-22129-1 US-PATENT-APPL-SN-370255 US-PATENT-CLASS-324-32 US-PATENT-CLASS-324-54 US-PATENT-3,866,114	c34 N75-19580	NASA-CASE-LEW-12441-1 US-PATENT-APPL-SN-559846
c33 N75-18479	NASA-CASE-MSC-14129-1 US-PATENT-APPL-SN-362146 US-PATENT-CLASS-307-229 US-PATENT-CLASS-307-235E US-PATENT-CLASS-307-267 US-PATENT-CLASS-328-58 US-PATENT-CLASS-328-115 US-PATENT-CLASS-328-151 US-PATENT-3,869,624	c35 N75-19611	NASA-CASE-LAB-11071-1 US-PATENT-APPL-SN-334349 US-PATENT-CLASS-73-221 US-PATENT-CLASS-417-36 US-PATENT-CLASS-417-138 US-PATENT-CLASS-417-395 US-PATENT-3,864,060
c37 N75-18573	NASA-CASE-NPO-13253-1 US-PATENT-APPL-SN-395687 US-PATENT-CLASS-248-358R US-PATENT-3,863,881	c35 N75-19612	NASA-CASE-LAB-11237-1 US-PATENT-APPL-SN-402868 US-PATENT-CLASS-73-46 US-PATENT-CLASS-73-49.2 US-PATENT-CLASS-340-242 US-PATENT-3,864,960
c37 N75-18574	NASA-CASE-GSC-11079-1 US-PATENT-APPL-SN-100637 US-PATENT-CLASS-308-10 US-PATENT-3,865,442	c35 N75-19613	NASA-CASE-LAB-11207-1 US-PATENT-APPL-SN-385013 US-PATENT-CLASS-178-DIG.20 US-PATENT-CLASS-250-332 US-PATENT-CLASS-356-83 US-PATENT-CLASS-356-96 US-PATENT-CLASS-356-186 US-PATENT-CLASS-356-189 US-PATENT-3,869,212
c19 N75-15329	NASA-CASE-MFS-22734-1 US-PATENT-APPL-SN-453232 US-PATENT-CLASS-244-162 US-PATENT-3,866,863	c35 N75-19614	NASA-CASE-LAB-11173-1 US-PATENT-APPL-SN-354408 US-PATENT-CLASS-73-557 US-PATENT-CLASS-332-2 US-PATENT-3,868,856
c26 N75-19408	NASA-CASE-LEW-11696-2 US-PATENT-APPL-SN-298156 US-PATENT-APPL-SN-436315 US-PATENT-CLASS-29-194 US-PATENT-CLASS-29-196.2 US-PATENT-CLASS-29-196.6 US-PATENT-CLASS-29-197 US-PATENT-3,869,779	c35 N75-19615	NASA-CASE-MFS-22189-1 US-PATENT-APPL-SN-405342 US-PATENT-CLASS-33-148D US-PATENT-CLASS-73-143 US-PATENT-3,864,953
c33 N75-19515	NASA-CASE-MSC-14131-1 US-PATENT-APPL-SN-373588 US-PATENT-CLASS-307-260 US-PATENT-CLASS-324-78J US-PATENT-CLASS-328-59 US-PATENT-CLASS-331-78 US-PATENT-3,866,128		

ACCESSION NUMBER INDEX

c35 N75-19616	NASA-CASE-MFS-20932-1 US-PATENT-APPL-SN-374441 US-PATENT-CLASS-250-505 US-PATENT-CLASS-250-508 US-PATENT-CLASS-250-510 US-PATENT-3,869,615	c73 N75-22108	US-PATENT-APPL-SN-555750 NASA-CASE-HQN-10841-1 US-PATENT-APPL-SN-560891
c35 N75-19627	NASA-CASE-NPO-13606-1 US-PATENT-APPL-SN-553210	c37 N75-22748	NASA-CASE-NPO-13619-1 US-PATENT-APPL-SN-572990
c35 N75-19628	NASA-CASE-NPO-13614-1 US-PATENT-APPL-SN-553209	c35 N75-23910	NASA-CASE-NPC-13327-1 US-PATENT-APPL-SN-429437 US-PATENT-CLASS-247-171 US-PATENT-CLASS-250-203 US-PATENT-CLASS-250-2118 US-PATENT-3,875,404
c36 N75-19652	NASA-CASE-NPO-13131-1 US-PATENT-APPL-SN-390468 US-PATENT-CLASS-178-7.1 US-PATENT-CLASS-250-2118 US-PATENT-CLASS-250-578 US-PATENT-CLASS-315-1698 US-PATENT-CLASS-340-1731S US-PATENT-3,865,975	c05 N75-24716	NASA-CASE-HSC-14339-1 US-PATENT-APPL-SN-347953 US-PATENT-CLASS-128-2.06E US-PATENT-CLASS-128-DIG.4 US-PATENT-CLASS-128-2.06B US-PATENT-3,882,846
c36 N75-19653	NASA-CASE-HQN-10844-1 US-PATENT-APPL-SN-412080 US-PATENT-CLASS-356-106LR US-PATENT-3,869,210	c07 N75-24736	NASA-CASE-ARC-10754-1 US-PATENT-APPL-SN-398886 US-PATENT-CLASS-137-15.1 US-PATENT-CLASS-244-5JB US-PATENT-3,883,095
c36 N75-19654	NASA-CASE-GSC-11746-1 US-PATENT-APPL-SN-393528 US-PATENT-CLASS-331-94.5H US-PATENT-3,869,680	c09 N75-24758	NASA-CASE-GSC-11127-1 US-PATENT-APPL-SN-401466 US-PATENT-CLASS-318-314 US-PATENT-CLASS-318-318 US-PATENT-CLASS-318-341 US-PATENT-3,883,785
c36 N75-19655	NASA-CASE-LAR-11341-1 US-PATENT-APPL-SN-367293 US-PATENT-CLASS-330-4.3 US-PATENT-CLASS-331-94.5P US-PATENT-3,868,591	c12 N75-24774	NASA-CASE-NPO-13263-1 US-PATENT-APPL-SN-393523 US-PATENT-CLASS-73-505 US-PATENT-3,882,132
c37 N75-19683	NASA-CASE-HSC-19095-1 US-PATENT-APPL-SN-415486 US-PATENT-CLASS-219-137 US-PATENT-3,864,542	c14 N75-24794	NASA-CASE-MFS-21488-1 US-PATENT-APPL-SN-359156 US-PATENT-CLASS-73-143 US-PATENT-3,882,719
c37 N75-19684	NASA-CASE-NPO-13345-1 US-PATENT-APPL-SN-462705 US-PATENT-CLASS-204-192 US-PATENT-CLASS-204-298 US-PATENT-3,864,239	c20 N75-24837	NASA-CASE-NPO-13303-1 US-PATENT-APPL-SN-457295 US-PATENT-CLASS-60-516 US-PATENT-CLASS-60-530 US-PATENT-CLASS-62-3 US-PATENT-CLASS-62-467 US-PATENT-CLASS-310-4 US-PATENT-CLASS-310-10 US-PATENT-CLASS-310-40 US-PATENT-CLASS-310-52 US-PATENT-CLASS-335-216 US-PATENT-3,875,435
c37 N75-19686	NASA-CASE-MFS-19193-1 US-PATENT-APPL-SN-461477 US-PATENT-CLASS-285-114 US-PATENT-CLASS-285-226 US-PATENT-3,869,151	c32 N75-24981	NASA-CASE-GSC-11743-1 US-PATENT-APPL-SN-370271 US-PATENT-CLASS-178-668 US-PATENT-CLASS-325-30 US-PATENT-CLASS-325-60 US-PATENT-3,878,464
c77 N75-20139	NASA-CASE-HSC-14143-1 US-PATENT-APPL-SN-393526 US-PATENT-CLASS-62-93 US-PATENT-CLASS-62-285 US-PATENT-CLASS-62-288 US-PATENT-CLASS-62-289 US-PATENT-CLASS-62-290 US-PATENT-CLASS-62-317 US-PATENT-CLASS-165-110 US-PATENT-CLASS-165-111 US-PATENT-3,868,830	c32 N75-24982	NASA-CASE-NPO-13140-1 US-PATENT-APPL-SN-374422 US-PATENT-CLASS-343-56C US-PATENT-CLASS-343-100PE US-PATENT-3,883,872
c77 N75-20140	NASA-CASE-GSC-11752-1 US-PATENT-APPL-SN-446569 US-PATENT-CLASS-219-497 US-PATENT-CLASS-219-501 US-PATENT-CLASS-219-505 US-PATENT-3,869,597	c33 N75-25040	NASA-CASE-GSC-11623-1 US-PATENT-APPL-SN-389929 US-PATENT-CLASS-331-1A US-PATENT-CLASS-331-1E US-PATENT-CLASS-331-25 US-PATENT-3,883,817
c32 N75-21485	NASA-CASE-HSC-12607-1 US-PATENT-APPL-SN-407323 US-PATENT-CLASS-178-DIG.12 US-PATENT-CLASS-358-36 US-PATENT-3,875,584	c33 N75-25041	NASA-CASE-ARC-10364-2 US-PATENT-APPL-SN-209618 US-PATENT-APPL-SN-433968 US-PATENT-CLASS-307-321 US-PATENT-CLASS-324-DIG.1 US-PATENT-CLASS-329-166 US-PATENT-CLASS-329-204 US-PATENT-3,883,812
c32 N75-21486	NASA-CASE-HSC-14558-1 US-PATENT-APPL-SN-428994 US-PATENT-CLASS-178-58A US-PATENT-CLASS-178-79 US-PATENT-3,875,332	c35 N75-25122	NASA-CASE-NPO-10764-2 US-PATENT-APPL-SN-273519 US-PATENT-APPL-SN-836280 US-PATENT-CLASS-73-356 US-PATENT-CLASS-116-114.5 US-PATENT-CLASS-117-72 US-PATENT-3,874,240
c35 N75-21582	NASA-CASE-MFS-22671-1 US-PATENT-APPL-SN-419831 US-PATENT-CLASS-178-69A US-PATENT-CLASS-235-181 US-PATENT-CLASS-324-57PS US-PATENT-CLASS-324-77H US-PATENT-CLASS-325-67 US-PATENT-3,875,500	c35 N75-25123	NASA-CASE-NPO-13214-1 NASA-CASE-NPO-13215-1 US-PATENT-APPL-SN-394149 US-PATENT-CLASS-178-DIG.29 US-PATENT-CLASS-178-7.2 US-PATENT-3,883,689
c35 N75-21600	NASA-CASE-NPO-13569-1 US-PATENT-APPL-SN-565162	c35 N75-25124	NASA-CASE-MFS-21704-1 US-PATENT-APPL-SN-386793 US-PATENT-CLASS-350-3.5
c37 N75-21631	NASA-CASE-LRW-11274-1 US-PATENT-APPL-SN-380630 US-PATENT-CLASS-277-27 US-PATENT-CLASS-277-40 US-PATENT-CLASS-277-134 US-PATENT-3,874,677		
c39 N75-21671	NASA-CASE-HSC-12619-1		

ACCESSION NUMBER INDEX

c35 N75-25134	US-PATENT-3,883,215 NASA-CASE-GSC-11956-1 US-PATENT-APPL-SN-576767	c33 N75-26245	US-PATENT-3,889,155 NASA-CASE-LAR-11352-1 US-PATENT-APPL-SN-459736
c37 N75-25185	NASA-CASE-NPO-13360-1 US-PATENT-APPL-SN-401920 US-PATENT-CLASS-228-1 US-PATENT-CLASS-251-333 US-PATENT-3,874,635		US-PATENT-APPL-SN-461073 US-PATENT-CLASS-324-58.5A US-PATENT-CLASS-324-58.5C US-PATENT-3,889,182
c37 N75-25186	NASA-CASE-MFS-22649-1 US-PATENT-APPL-SN-398901 US-PATENT-CLASS-408-112 US-PATENT-CLASS-408-186 US-PATENT-CLASS-408-193 US-PATENT-CLASS-408-195 US-PATENT-3,877,833	c33 N75-26246	NASA-CASE-KSC-10807-1 US-PATENT-APPL-SN-461073 US-PATENT-CLASS-324-72 US-PATENT-3,889,185
c51 N75-255C3	NASA-CASE-ARC-10722-1 US-PATENT-APPL-SN-428995 US-PATENT-CLASS-47-1.2 US-PATENT-CLASS-47-39 US-PATENT-CLASS-47-58 US-PATENT-3,882,634	c34 N75-26282	NASA-CASE-LAR-11110-1 US-PATENT-APPL-SN-420424 US-PATENT-CLASS-233-DIG.1 US-PATENT-CLASS-233-6 US-PATENT-CLASS-233-20RP US-PATENT-CLASS-233-25 US-PATENT-CLASS-233-46 US-PATENT-3,888,410
c54 N75-25594	NASA-CASE-MSC-14632-1 US-PATENT-APPL-SN-571459	c35 N75-26334	NASA-CASE-ARC-10344-2 US-PATENT-APPL-SN-446564 US-PATENT-CLASS-55-386 US-PATENT-3,887,345
c74 N75-25706	NASA-CASE-HQN-10542-1 US-PATENT-APPL-SN-163151 US-PATENT-CLASS-178-DIG.25 US-PATENT-CLASS-250-566 US-PATENT-CLASS-350-311 US-PATENT-3,883,436	c37 N75-26371	NASA-CASE-GSC-10984-1 US-PATENT-APPL-SN-127480 US-PATENT-CLASS-29-182.2 US-PATENT-CLASS-29-182.5 US-PATENT-CLASS-29-420.5 US-PATENT-CLASS-65-3 US-PATENT-CLASS-75-DIG.1 US-PATENT-CLASS-75-200 US-PATENT-CLASS-75-206R US-PATENT-CLASS-75-212 US-PATENT-CLASS-75-214 US-PATENT-CLASS-75-222 US-PATENT-CLASS-117-1266H US-PATENT-CLASS-117-126R US-PATENT-CLASS-161-92 US-PATENT-CLASS-161-93 US-PATENT-3,887,365
c76 N75-25730	NASA-CASE-GSC-11425-2 US-PATENT-APPL-SN-206266 US-PATENT-APPL-SN-394206 US-PATENT-CLASS-357-23 US-PATENT-CLASS-357-29 US-PATENT-CLASS-357-42 US-PATENT-CLASS-357-52 US-PATENT-CLASS-357-54 US-PATENT-CLASS-357-91 US-PATENT-3,882,530	c37 N75-26372	NASA-CASE-MFS-21931-1 US-PATENT-APPL-SN-464721 US-PATENT-CLASS-250-459 US-PATENT-CLASS-250-460 US-PATENT-CLASS-250-492 US-PATENT-3,889,122
c05 N75-25914	NASA-CASE-LAR-11252-1 US-PATENT-APPL-SN-367268 US-PATENT-CLASS-D12-76 US-PATENT-CLASS-244-13 US-PATENT-CLASS-244-15 US-PATENT-CLASS-244-42DA US-PATENT-CLASS-244-55 US-PATENT-3,884,432	c70 N75-26789	NASA-CASE-MFS-22758-1 US-PATENT-APPL-SN-581514
c05 N75-25915	NASA-CASE-ARC-10519-2 US-PATENT-APPL-SN-452767 US-PATENT-CLASS-280-150SB US-PATENT-CLASS-297-385 US-PATENT-CLASS-297-388 US-PATENT-CLASS-297-389 US-PATENT-3,887,233	c18 N75-27040	NASA-CASE-YHQ-02146 US-PATENT-APPL-SN-290043 US-PATENT-CLASS-52-71 US-PATENT-3,206,897
c25 N75-26043	NASA-CASE-LAR-11144-1 US-PATENT-APPL-SN-426405 US-PATENT-CLASS-117-106A US-PATENT-CLASS-117-107.2 US-PATENT-CLASS-117-201 US-PATENT-CLASS-118-48 US-PATENT-CLASS-118-49.1 US-PATENT-CLASS-148-175 US-PATENT-CLASS-252-62.36A US-PATENT-3,888,705	c18 N75-27041	NASA-CASE-MSC-14245-1 US-PATENT-APPL-SN-389916 US-PATENT-CLASS-214-1CM US-PATENT-3,894,573
c32 N75-26194	NASA-CASE-NPO-13217-1 US-PATENT-APPL-SN-362145 US-PATENT-CLASS-343-105R US-PATENT-CLASS-343-112D US-PATENT-3,889,264	c26 N75-27125	NASA-CASE-IMF-05868 US-PATENT-APPL-SN-512509 US-PATENT-CLASS-260-29.6 US-PATENT-3,475,442
c32 N75-26195	NASA-CASE-NPO-13321-1 US-PATENT-APPL-SN-455163 US-PATENT-CLASS-178-69.5R US-PATENT-CLASS-179-15ES US-PATENT-CLASS-325-4 US-PATENT-3,889,064	c26 N75-27126	NASA-CASE-IMF-06053 US-PATENT-APPL-SN-542192 US-PATENT-CLASS-75-17J US-PATENT-3,411,900
c33 N75-26243	NASA-CASE-GSC-11744-1 US-PATENT-APPL-SN-353162 US-PATENT-CLASS-179-15BC US-PATENT-CLASS-235-150.53 US-PATENT-CLASS-235-181 US-PATENT-CLASS-324-83Q US-PATENT-CLASS-328-133 US-PATENT-3,875,394	c26 N75-27127	NASA-CASE-IMF-03878 US-PATENT-APPL-SN-488745 US-PATENT-CLASS-75-17J US-PATENT-3,373,016
c33 N75-26244	NASA-CASE-MFS-22208-1 US-PATENT-APPL-SN-448325 US-PATENT-CLASS-315-10 US-PATENT-CLASS-315-367 US-PATENT-CLASS-315-369 US-PATENT-CLASS-315-387	c27 N75-27160	NASA-CASE-MFS-22344-1 US-PATENT-APPL-SN-350250 US-PATENT-CLASS-106-48 US-PATENT-CLASS-106-54 US-PATENT-CLASS-117-129 US-PATENT-3,891,452
		c33 N75-27249	NASA-CASE-IMS-02744 US-PATENT-APPL-SN-351950 US-PATENT-CLASS-200-129 US-PATENT-3,281,558
		c33 N75-27250	NASA-CASE-IMF-01296 US-PATENT-APPL-SN-127986 US-PATENT-CLASS-315-30 US-PATENT-3,189,784
		c33 N75-27251	NASA-CASE-HQN-10069 US-PATENT-APPL-SN-739074 US-PATENT-CLASS-330-5 US-PATENT-3,551,831
		c33 N75-27252	NASA-CASE-LAR-11042-1 US-PATENT-APPL-SN-440916 US-PATENT-CLASS-204-242

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-204-267		US-PATENT-CLASS-315-111
	US-PATENT-CLASS-204-279		US-PATENT-3,469,143
	US-PATENT-CLASS-204-286		NASA-CASE-MPS-22060-1
	US-PATENT-CLASS-204-290B	c35 N75-29380	US-PATENT-APPL-SN-521603
	US-PATENT-3,891,533		US-PATENT-CLASS-23-254E
c33 N75-27261	NASA-CASE-IAR-11264-1		US-PATENT-CLASS-23-255E
	US-PATENT-APPL-SN-594971		US-PATENT-CLASS-73-23
c35 N75-27328	NASA-CASE-MPS-22537-1		US-PATENT-CLASS-311-37
	US-PATENT-APPL-SN-387266		US-PATENT-CLASS-331-65
	US-PATENT-CLASS-350-3.5		US-PATENT-3,895,912
	US-PATENT-3,888,561	c35 N75-29381	NASA-CASE-ARC-10806-1
c35 N75-27329	NASA-CASE-XMF-05882		US-PATENT-APPL-SN-478802
	US-PATENT-APPL-SN-533650		US-PATENT-CLASS-73-178B
	US-PATENT-CLASS-250-83.3		US-PATENT-3,895,521
	US-PATENT-3,454,766	c35 N75-29382	NASA-CASE-IMS-05731
c35 N75-27330	NASA-CASE-IAR-11354-1		US-PATENT-APPL-SN-441279
	US-PATENT-APPL-SN-409990		US-PATENT-CLASS-73-117.4
	US-PATENT-CLASS-195-103.5R		US-PATENT-3,375,712
	US-PATENT-CLASS-195-120	c37 N75-29426	NASA-CASE-XLE-10717
	US-PATENT-CLASS-195-127		US-PATENT-APPL-SN-844243
	US-PATENT-CLASS-195-141		US-PATENT-CLASS-315-111
	US-PATENT-3,884,765		US-PATENT-3,004,189
c35 N75-27331	NASA-CASE-GSC-11829-1	c03 N75-30132	NASA-CASE-ERC-10419-1
	US-PATENT-APPL-SN-502136		US-PATENT-APPL-SN-219722
	US-PATENT-CLASS-250-385		US-PATENT-CLASS-243-E.5R
	US-PATENT-3,891,851		US-PATENT-CLASS-343-112CA
c36 N75-27364	NASA-CASE-XLE-2529-2		US-PATENT-3,900,847
	US-PATENT-APPL-SN-848403	c23 N75-30256	NASA-CASE-MPS-22356-1
	US-PATENT-CLASS-240-41B		US-PATENT-APPL-SN-489008
	US-PATENT-CLASS-330-4.3		US-PATENT-CLASS-260-78TF
	US-PATENT-CLASS-331-94.5A		US-PATENT-CLASS-260-346.3
	US-PATENT-3,894,289		US-PATENT-CLASS-260-520
c37 N75-27376	NASA-CASE-XMS-01330		US-PATENT-3,899,517
	US-PATENT-APPL-SN-153624	c24 N75-30260	NASA-CASE-LAR-10347-1
	US-PATENT-APPL-SN-322665		US-PATENT-APPL-SN-424038
	US-PATENT-CLASS-219-125		US-PATENT-CLASS-29-610
	US-PATENT-3,275,794		US-PATENT-CLASS-29-613
c45 N75-27585	NASA-CASE-NPO-13231-1		US-PATENT-CLASS-338-13
	US-PATENT-APPL-SN-428993		US-PATENT-CLASS-338-283
	US-PATENT-CLASS-250-343		US-PATENT-3,898,730
	US-PATENT-CLASS-250-345	c32 N75-30385	NASA-CASE-BQN-10880-1
	US-PATENT-CLASS-250-432		US-PATENT-APPL-SN-595254
	US-PATENT-3,891,848	c33 N75-30428	NASA-CASE-MPS-22342-1
c54 N75-27758	NASA-CASE-NPO-13386-1		US-PATENT-APPL-SN-361666
	US-PATENT-APPL-SN-475336		US-PATENT-CLASS-330-13
	US-PATENT-CLASS-214-1B		US-PATENT-CLASS-330-18
	US-PATENT-CLASS-214-1CM		US-PATENT-CLASS-330-40
	US-PATENT-CLASS-318-640		US-PATENT-CLASS-330-63
	US-PATENT-3,888,362		US-PATENT-3,898,578
c54 N75-27759	NASA-CASE-MSC-13601-2	c33 N75-30429	NASA-CASE-MPS-21616-1
	US-PATENT-APPL-SN-395495		US-PATENT-APPL-SN-464723
	US-PATENT-CLASS-351-38		US-PATENT-CLASS-330-24
	US-PATENT-3,891,311		US-PATENT-CLASS-330-207A
c54 N75-27760	NASA-CASE-ARC-10753-1		US-PATENT-3,899,745
	US-PATENT-APPL-SN-427395	c33 N75-30430	NASA-CASE-NPO-13504-1
	US-PATENT-CLASS-74-471XY		US-PATENT-APPL-SN-484852
	US-PATENT-CLASS-128-2.05Z		US-PATENT-CLASS-33-96
	US-PATENT-CLASS-128-2V		US-PATENT-CLASS-333-21E
	US-PATENT-CLASS-128-24A		US-PATENT-CLASS-333-83BT
	US-PATENT-3,893,449		US-PATENT-CLASS-333-98B
c54 N75-27761	NASA-CASE-NPO-13313-1		US-PATENT-3,902,143
	US-PATENT-APPL-SN-449153	c33 N75-30431	NASA-CASE-KSC-10782-1
	US-PATENT-CLASS-55-DIG.35		US-PATENT-APPL-SN-400467
	US-PATENT-CLASS-128-145.8		US-PATENT-CLASS-178-DIG.1
	US-PATENT-3,893,458		US-PATENT-CLASS-178-6.8
c24 N75-28135	NASA-CASE-MPS-21077-1		US-PATENT-3,900,705
	US-PATENT-APPL-SN-127481	c35 N75-30502	NASA-CASE-ARC-10802-1
	US-PATENT-CLASS-29-419		US-PATENT-APPL-SN-484208
	US-PATENT-CLASS-228-190		US-PATENT-CLASS-205-343
	US-PATENT-CLASS-228-193		US-PATENT-CLASS-250-351
	US-PATENT-3,894,677		US-PATENT-CLASS-250-373
c44 N75-28519	NASA-CASE-NPO-13579-1		US-PATENT-CLASS-356-51
	NASA-CASE-NPO-13580-1		US-PATENT-3,899,252
	US-PATENT-APPL-SN-598969	c35 N75-30503	NASA-CASE-LBW-12078-1
c23 N75-29181	NASA-CASE-IAR-11828-1		US-PATENT-APPL-SN-447124
	US-PATENT-APPL-SN-562992		US-PATENT-CLASS-73-194M
c25 N75-29192	NASA-CASE-BQN-10462		US-PATENT-CLASS-73-195
	US-PATENT-APPL-SN-773530		US-PATENT-3,898,882
	US-PATENT-CLASS-118-43	c35 N75-30504	NASA-CASE-MSC-12531-1
	US-PATENT-3,603,285		US-PATENT-APPL-SN-354612
c26 N75-29236	NASA-CASE-XNP-01311		US-PATENT-CLASS-307-204
	US-PATENT-APPL-SN-430496		US-PATENT-CLASS-307-211
	US-PATENT-CLASS-148-127		US-PATENT-CLASS-307-219
	US-PATENT-3,390,023		US-PATENT-CLASS-328-61
c27 N75-29263	NASA-CASE-IAR-11397-1		US-PATENT-CLASS-328-62
	US-PATENT-APPL-SN-532784		US-PATENT-3,900,741
c33 N75-29318	NASA-CASE-ARC-10266-1	c36 N75-30524	NASA-CASE-NPO-13308-1
	US-PATENT-APPL-SN-453241		US-PATENT-APPL-SN-455165
	US-PATENT-APPL-SN-585988		US-PATENT-CLASS-310-4

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-331-DIG.1		US-PATENT-3,906,769
	US-PATENT-3,899,696	c34 N75-33342	NASA-CASE-MSC-14273-1
c37 N75-30562	NASA-CASE-LEW-11076-3		US-PATENT-APPL-SN-385522
	US-PATENT-APPL-SN-405346		US-PATENT-CLASS-210-82
	US-PATENT-CLASS-308-73		US-PATENT-CLASS-210-234
	US-PATENT-CLASS-308-121		US-PATENT-CLASS-210-259
	US-PATENT-3,899,224		US-PATENT-CLASS-210-304
c73 N75-30876	NASA-CASE-LEW-11227-1		US-PATENT-CLASS-210-333
	US-PATENT-APPL-SN-146939		US-PATENT-CLASS-210-340
	US-PATENT-CLASS-244-1SS		US-PATENT-CLASS-210-411
	US-PATENT-CLASS-250-493		US-PATENT-CLASS-210-425
	US-PATENT-CLASS-250-496		US-PATENT-CLASS-210-512
	US-PATENT-3,899,680		US-PATENT-3,907,686
c33 N75-31329	NASA-CASE-NPO-13423-1	c35 N75-33367	NASA-CASE-LAR-10629-1
	US-PATENT-APPL-SN-470429		US-PATENT-APPL-SN-402867
	US-PATENT-CLASS-73-88.5		US-PATENT-CLASS-73-12
	US-PATENT-CLASS-128-2S		US-PATENT-CLASS-73-170R
	US-PATENT-CLASS-338-2		US-PATENT-CLASS-73-432PS
	US-PATENT-3,905,356		US-PATENT-CLASS-116-114A
c33 N75-31330	NASA-CASE-NPO-13426-1		US-PATENT-3,896,758
	US-PATENT-APPL-SN-45053	c35 N75-33368	NASA-CASE-LAR-11326-1
	US-PATENT-CLASS-307-225R		US-PATENT-APPL-SN-491416
	US-PATENT-CLASS-328-41		US-PATENT-CLASS-195-103.5R
	US-PATENT-3,906,374		US-PATENT-3,907,646
c33 N75-31331	NASA-CASE-NPO-11156-2	c35 N75-33369	NASA-CASE-LAR-11263-1
	US-PATENT-APPL-SN-174684		US-PATENT-APPL-SN-472775
	US-PATENT-CLASS-307-238		US-PATENT-CLASS-73-141A
	US-PATENT-CLASS-340-173CA		US-PATENT-3,906,788
	US-PATENT-CLASS-357-7	c37 N75-33395	NASA-CASE-MFS-22283-1
	US-PATENT-CLASS-357-24		US-PATENT-APPL-SN-387095
	US-PATENT-3,906,296		US-PATENT-CLASS-29-26A
c33 N75-31332	NASA-CASE-NPO-13348-1		US-PATENT-CLASS-279-1B
	US-PATENT-APPL-SN-452770		US-PATENT-CLASS-279-89
	US-PATENT-CLASS-250-238		US-PATENT-CLASS-279-107
	US-PATENT-CLASS-250-370		US-PATENT-CLASS-294-86.33
	US-PATENT-CLASS-357-5		US-PATENT-CLASS-294-116
	US-PATENT-3,906,231		US-PATENT-3,907,312
c36 N75-31426	NASA-CASE-ARC-10370-1	c52 N75-33640	NASA-CASE-LEW-12051-1
	US-PATENT-APPL-SN-137391		US-PATENT-APPL-SN-397478
	US-PATENT-CLASS-331-94.5G		US-PATENT-CLASS-128-230
	US-PATENT-CLASS-331-94.5P		US-PATENT-CLASS-128-305
	US-PATENT-3,906,397		US-PATENT-3,906,954
c36 N75-31427	NASA-CASE-NPO-13175-1	c09 N76-10148	NASA-CASE-ARC-10903-1
	US-PATENT-APPL-SN-374423		US-PATENT-APPL-SN-623536
	US-PATENT-CLASS-331-94.5C	c27 N76-13294	NASA-CASE-NPO-13690-1
	US-PATENT-CLASS-350-96W		US-PATENT-APPL-SN-633876
	US-PATENT-CLASS-350-161	c34 N76-13419	NASA-CASE-LAR-11669-1
	US-PATENT-3,906,393		US-PATENT-APPL-SN-630582
c37 N75-31446	NASA-CASE-LEW-11925-1	c37 N76-13496	NASA-CASE-MSC-14757-1
	US-PATENT-APPL-SN-450505		US-PATENT-APPL-SN-625734
	US-PATENT-CLASS-308-191	c37 N76-13500	NASA-CASE-MFS-23051-1
	US-PATENT-CLASS-308-195		US-PATENT-APPL-SN-632111
	US-PATENT-CLASS-308-201	c60 N76-13781	NASA-CASE-GSC-12044-1
	US-PATENT-3,905,660		US-PATENT-APPL-SN-631341
c39 N75-31479	NASA-CASE-LAR-11181-1	c74 N76-13909	NASA-CASE-MFS-23194-1
	US-PATENT-APPL-SN-571816		US-PATENT-APPL-SN-629458
c31 N75-32262	NASA-CASE-MSC-14773-1	c15 N76-14158	NASA-CASE-LAR-11051-1
	US-PATENT-APPL-SN-612966		US-PATENT-APPL-SN-384773
c34 N75-32389	NASA-CASE-ARC-10896-1		US-PATENT-CLASS-74-5.7
	US-PATENT-APPL-SN-615030		US-PATENT-CLASS-244-3.21
c36 N75-32441	NASA-CASE-NPO-13449-1		US-PATENT-CLASS-244-165
	US-PATENT-APPL-SN-420813		US-PATENT-3,915,416
	US-PATENT-CLASS-310-11	c18 N76-14186	NASA-CASE-MSC-12559-1
	US-PATENT-CLASS-330-4.3		US-PATENT-APPL-SN-370582
	US-PATENT-CLASS-331-94.5P		US-PATENT-CLASS-33-286
	US-PATENT-CLASS-331-94.5G		US-PATENT-CLASS-35-12
	US-PATENT-3,906,398		US-PATENT-CLASS-178-DIG.20
c37 N75-32465	NASA-CASE-ARC-10907-1		US-PATENT-CLASS-244-161
	US-PATENT-APPL-SN-619986		US-PATENT-CLASS-356-153
c44 N75-32581	NASA-CASE-MFS-21628-1		US-PATENT-3,910,533
	US-PATENT-APPL-SN-421702	c20 N76-14190	NASA-CASE-LEW-11593-1
	US-PATENT-CLASS-60-641		US-PATENT-APPL-SN-363691
	US-PATENT-CLASS-60-659		US-PATENT-CLASS-60-39.23
	US-PATENT-CLASS-126-271		US-PATENT-CLASS-60-39.29
	US-PATENT-CLASS-165-105		US-PATENT-CLASS-60-39.74R
	US-PATENT-CLASS-244-173		US-PATENT-3,910,035
	US-PATENT-3,903,699	c20 N76-14191	NASA-CASE-LEW-11118-2
c54 N75-32766	NASA-CASE-ARC-10820-1		US-PATENT-APPL-SN-436316
	US-PATENT-APPL-SN-620675		US-PATENT-CLASS-60-265
c24 N75-33181	NASA-CASE-LEW-11484-1		US-PATENT-CLASS-60-267
	US-PATENT-APPL-SN-356554		US-PATENT-CLASS-239-127.3
	US-PATENT-CLASS-29-DIG.24		US-PATENT-3,910,039
	US-PATENT-CLASS-29-DIG.39	c24 N76-14203	NASA-CASE-NPO-12122-1
	US-PATENT-CLASS-29-527.2		US-PATENT-APPL-SN-401921
	US-PATENT-CLASS-72-46		US-PATENT-CLASS-149-36
	US-PATENT-CLASS-117-8.5		US-PATENT-CLASS-423-407
	US-PATENT-CLASS-117-38		US-PATENT-3,919,014
	US-PATENT-CLASS-117-46PS	c24 N76-14204	NASA-CASE-MSC-12568-1
	US-PATENT-CLASS-117-105.2		US-PATENT-APPL-SN-325784

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-136-146		US-PATENT-CLASS-72-363
	US-PATENT-CLASS-136-148		US-PATENT-3,864,797
	US-PATENT-CLASS-162-102		US-PATENT-3,914,969
	US-PATENT-CLASS-162-153	c37 N76-14463	NASA-CASE-HFS-22323-1
	US-PATENT-CLASS-162-222		US-PATENT-APPL-SN-474745
	US-PATENT-CLASS-162-228		US-PATENT-CLASS-137-515.3
	US-PATENT-3,910,814		US-PATENT-CLASS-137-550
c27 N76-14264	NASA-CASE-HSC-14182-1		US-PATENT-CLASS-210-429
	US-PATENT-APPL-SN-419748		US-PATENT-CLASS-251-149.6
	US-PATENT-CLASS-403-28		US-PATENT-3,910,307
	US-PATENT-CLASS-403-179	c44 N76-14595	NASA-CASE-HFS-22562-1
	US-PATENT-CLASS-428-77		US-PATENT-APPL-SN-458484
	US-PATENT-CLASS-428-109		US-PATENT-CLASS-29-194
	US-PATENT-CLASS-428-212		US-PATENT-CLASS-29-195
	US-PATENT-CLASS-428-214		US-PATENT-CLASS-29-197
	US-PATENT-CLASS-428-416		US-PATENT-CLASS-126-270
	US-PATENT-CLASS-428-447		US-PATENT-CLASS-136-206
	US-PATENT-3,920,339		US-PATENT-CLASS-204-32B
c31 N76-14284	NASA-CASE-NPO-13435-1		US-PATENT-CLASS-204-33
	US-PATENT-APPL-SN-478803		US-PATENT-CLASS-204-38A
	US-PATENT-CLASS-62-49		US-PATENT-CLASS-204-40
	US-PATENT-CLASS-62-129		US-PATENT-CLASS-204-42
	US-PATENT-CLASS-73-295		US-PATENT-CLASS-204-49
	US-PATENT-3,914,950		US-PATENT-3,920,413
c32 N76-14321	NASA-CASE-LAR-11021-1	c44 N76-14600	NASA-CASE-LEW-11065-2
	US-PATENT-APPL-SN-453115		US-PATENT-APPL-SN-154930
	US-PATENT-CLASS-325-304		US-PATENT-APPL-SN-371322
	US-PATENT-CLASS-325-306		US-PATENT-CLASS-29-572
	US-PATENT-CLASS-325-372		US-PATENT-CLASS-136-89
	US-PATENT-CLASS-328-145		US-PATENT-3,912,540
	US-PATENT-CLASS-343-176	c44 N76-14601	NASA-CASE-HFS-22749-1
	US-PATENT-3,916,316		US-PATENT-APPL-SN-483857
c33 N76-14371	NASA-CASE-KSC-10834-1		US-PATENT-CLASS-136-90
	US-PATENT-APPL-SN-536535		US-PATENT-CLASS-136-114
	US-PATENT-CLASS-178-69.5R		US-PATENT-CLASS-136-162
	US-PATENT-CLASS-178-88		US-PATENT-CLASS-136-182
	US-PATENT-CLASS-328-63		US-PATENT-3,912,541
	US-PATENT-CLASS-328-190	c44 N76-14602	NASA-CASE-NPO-13497-1
	US-PATENT-3,916,084		US-PATENT-APPL-SN-526448
c33 N76-14372	NASA-CASE-LAR-10970-1		US-PATENT-CLASS-126-271
	US-PATENT-APPL-SN-527790		US-PATENT-CLASS-237-1A
	US-PATENT-CLASS-343-770		US-PATENT-CLASS-350-211
	US-PATENT-CLASS-343-797		US-PATENT-3,915,148
	US-PATENT-CLASS-343-846	c44 N76-14612	NASA-CASE-LEW-11430-1
	US-PATENT-3,919,710		US-PATENT-APPL-SN-642083
c33 N76-14373	NASA-CASE-NPO-13451-1	c52 N76-14757	NASA-CASE-HSC-14180-1
	US-PATENT-APPL-SN-501012		US-PATENT-APPL-SN-354406
	US-PATENT-CLASS-235-925H		US-PATENT-CLASS-128-2.1A
	US-PATENT-CLASS-307-221R		US-PATENT-CLASS-128-2.06R
	US-PATENT-CLASS-328-37		US-PATENT-CLASS-128-2B
	US-PATENT-3,911,330		US-PATENT-3,910,257
c35 N76-14429	NASA-CASE-LAR-11552-1	c54 N76-14804	NASA-CASE-HSC-14640-1
	US-PATENT-APPL-SN-518685		US-PATENT-APPL-SN-526449
	US-PATENT-CLASS-73-182		US-PATENT-CLASS-73-421R
	US-PATENT-CLASS-73-212		US-PATENT-CLASS-128-2F
	US-PATENT-3,914,997		US-PATENT-3,915,012
c35 N76-14430	NASA-CASE-NPO-13170-1	c60 N76-14818	NASA-CASE-NPO-13422-1
	US-PATENT-APPL-SN-382261		US-PATENT-APPL-SN-521601
	US-PATENT-CLASS-73-88.5R		US-PATENT-CLASS-340-147C
	US-PATENT-CLASS-338-6		US-PATENT-CLASS-340-147R
	US-PATENT-3,914,991		US-PATENT-3,916,380
c35 N76-14431	NASA-CASE-LEW-11915-1	c75 N76-14931	NASA-CASE-HFS-22287-1
	US-PATENT-APPL-SN-474744		US-PATENT-APPL-SN-438147
	US-PATENT-CLASS-60-39.29		US-PATENT-CLASS-73-12
	US-PATENT-CLASS-137-15.2		US-PATENT-CLASS-89-8
	US-PATENT-CLASS-235-151.34		US-PATENT-CLASS-315-111.6
	US-PATENT-3,911,260		US-PATENT-3,916,761
c35 N76-14433	JPL-CASE-13687	c12 N76-15189	NASA-CASE-HSC-12611-1
	NASA-CASE-NPO-13687-1		US-PATENT-APPL-SN-446560
	US-PATENT-APPL-SN-641803		US-PATENT-CLASS-350-288
c35 N76-14434	JPL-CASE-13756		US-PATENT-CLASS-350-293
	NASA-CASE-NPO-13756-1		US-PATENT-CLASS-427-162
	US-PATENT-APPL-SN-641801		US-PATENT-CLASS-427-250
c36 N76-14447	NASA-CASE-ARC-10642-1		US-PATENT-3,927,227
	US-PATENT-APPL-SN-446562	c23 N76-15268	NASA-CASE-HFS-22355-1
	US-PATENT-CLASS-356-28		US-PATENT-APPL-SN-487852
	US-PATENT-CLASS-356-106R		US-PATENT-CLASS-260-32.6N
	US-PATENT-3,915,572		US-PATENT-CLASS-260-32.8N
c37 N76-14460	NASA-CASE-HFS-19194-1		US-PATENT-CLASS-260-47CF
	US-PATENT-APPL-SN-483850		US-PATENT-CLASS-260-78TF
	US-PATENT-CLASS-285-226		US-PATENT-CLASS-260-346.3
	US-PATENT-CLASS-285-265		US-PATENT-CLASS-260-571
	US-PATENT-3,915,482		US-PATENT-3,925,312
c37 N76-14461	NASA-CASE-LEW-11694-2	c27 N76-15310	NASA-CASE-ARC-10714-1
	US-PATENT-APPL-SN-352381		US-PATENT-APPL-SN-398885
	US-PATENT-APPL-SN-462903		US-PATENT-CLASS-260-2.5AK
	US-PATENT-CLASS-29-421		US-PATENT-CLASS-427-196
	US-PATENT-CLASS-72-54		US-PATENT-CLASS-427-426
	US-PATENT-CLASS-72-63		US-PATENT-CLASS-428-303

ACCESSION NUMBER INDEX

c27 N76-15311	US-PATENT-3,916,060 NASA-CASE-NPO-13120-1 US-PATENT-APPL-SN-348422 US-PATENT-CLASS-29-182,5 US-PATENT-3,926,567	c02 N76-16014	US-PATENT-CLASS-250-499 US-PATENT-CLASS-250-500 US-PATENT-3,924,137 NASA-CASE-LAR-11575-1 US-PATENT-APPL-SN-527727 US-PATENT-CLASS-244-139 US-PATENT-3,930,628
c27 N76-15314	NASA-CASE-MSC-14795-1 US-PATENT-APPL-SN-640806	c27 N76-16228	NASA-CASE-NPO-12061-1 US-PATENT-APPL-SN-45549 US-PATENT-CLASS-260-92.1 US-PATENT-CLASS-260-879 US-PATENT-CLASS-260-900 US-PATENT-3,931,132
c32 N76-15329	NASA-CASE-GSC-11968-1 US-PATENT-APPL-SN-512825 US-PATENT-CLASS-343-779 US-PATENT-CLASS-343-837 US-PATENT-CLASS-343-876 US-PATENT-3,927,408	c27 N76-16229	NASA-CASE-LEW-11179-1 US-PATENT-APPL-SN-357312 US-PATENT-CLASS-29-195A US-PATENT-CLASS-427-203 US-PATENT-CLASS-427-204 US-PATENT-CLASS-427-205 US-PATENT-CLASS-427-270 US-PATENT-CLASS-427-275 US-PATENT-CLASS-427-287 US-PATENT-CLASS-428-450 US-PATENT-CLASS-428-457 US-PATENT-CLASS-428-469 US-PATENT-CLASS-428-539 US-PATENT-3,931,447
c32 N76-15330	NASA-CASE-LAR-11112-1 US-PATENT-APPL-SN-491419 US-PATENT-CLASS-343-786 US-PATENT-3,924,237	c27 N76-16230	NASA-CASE-ARC-10813-1 US-PATENT-APPL-SN-437556 US-PATENT-CLASS-264-331 US-PATENT-CLASS-428-412 US-PATENT-CLASS-428-413 US-PATENT-CLASS-428-447 US-PATENT-CLASS-428-911 US-PATENT-CLASS-428-920 US-PATENT-CLASS-428-921 US-PATENT-3,928,708
c33 N76-15373	NASA-CASE-LEW-11938-1 US-PATENT-APPL-SN-544611 US-PATENT-CLASS-317-258 US-PATENT-CLASS-317-261 US-PATENT-3,924,164	c31 N76-16245	NASA-CASE-MSC-19523-1 US-PATENT-APPL-SN-643895 NASA-CASE-MSC-14557-1 US-PATENT-APPL-SN-464720 US-PATENT-CLASS-178-69C US-PATENT-CLASS-178-88 US-PATENT-CLASS-325-321 US-PATENT-3,924,068
c35 N76-15431	NASA-CASE-MSC-13802-2 US-PATENT-APPL-SN-189438 US-PATENT-APPL-SN-475338 US-PATENT-CLASS-250-251 US-PATENT-CLASS-250-287 US-PATENT-CLASS-250-423 US-PATENT-3,916,187	c32 N76-16249	NASA-CASE-MSC-14557-1 US-PATENT-APPL-SN-426994 US-PATENT-APPL-SN-464720 US-PATENT-CLASS-178-69C US-PATENT-CLASS-178-88 US-PATENT-CLASS-325-321 US-PATENT-3,924,068
c35 N76-15432	NASA-CASE-LAR-11435-1 US-PATENT-APPL-SN-522556 US-PATENT-CLASS-73-1R US-PATENT-CLASS-310-8.2 US-PATENT-3,924,444	c33 N76-16331	NASA-CASE-MSC-14649-1 US-PATENT-APPL-SN-505819 US-PATENT-CLASS-324-79D US-PATENT-CLASS-328-134 US-PATENT-3,924,183
c35 N76-15433	NASA-CASE-GSC-11892-1 US-PATENT-APPL-SN-502135 US-PATENT-CLASS-250-336 US-PATENT-CLASS-250-385 US-PATENT-CLASS-250-489 US-PATENT-3,927,324	c33 N76-16332	NASA-CASE-GSC-11849-1 US-PATENT-APPL-SN-470428 US-PATENT-CLASS-174-145 US-PATENT-CLASS-174-148 US-PATENT-CLASS-339-143C US-PATENT-CLASS-339-198R US-PATENT-CLASS-339-242 US-PATENT-CLASS-339-275R US-PATENT-3,931,456
c35 N76-15434	NASA-CASE-LEW-11072-2 US-PATENT-APPL-SN-104885 US-PATENT-APPL-SN-254323 US-PATENT-CLASS-136-211 US-PATENT-CLASS-136-212 US-PATENT-CLASS-136-225 US-PATENT-3,729,343 US-PATENT-3,925,104	c35 N76-16390	NASA-CASE-NPO-13388-1 US-PATENT-APPL-SN-522552 US-PATENT-CLASS-324-4JR US-PATENT-3,924,176
c35 N76-15435	NASA-CASE-NPO-13506-1 US-PATENT-APPL-SN-483851 US-PATENT-CLASS-343-909 US-PATENT-3,924,239	c35 N76-16391	NASA-CASE-NPO-10166-2 US-PATENT-APPL-SN-192803 US-PATENT-APPL-SN-668116 US-PATENT-CLASS-360-9 US-PATENT-CLASS-360-10 US-PATENT-CLASS-360-35 US-PATENT-CLASS-360-101 US-PATENT-3,924,267
c35 N76-15436	NASA-CASE-GSC-11895-1 US-PATENT-APPL-SN-511887 US-PATENT-CLASS-331-3 US-PATENT-CLASS-331-94 US-PATENT-3,924,200	c35 N76-16392	NASA-CASE-LAR-11458-1 US-PATENT-APPL-SN-504225 US-PATENT-CLASS-294-1R US-PATENT-CLASS-294-19R US-PATENT-3,929,364
c36 N76-15451	NASA-CASE-GSC-12083-1 US-PATENT-APPL-SN-643897 NASA-CASE-NFS-22707-1 US-PATENT-APPL-SN-535410 US-PATENT-CLASS-74-384 US-PATENT-CLASS-74-665B US-PATENT-CLASS-214-1R US-PATENT-3,922,930	c35 N76-16393	NASA-CASE-GSC-11889-1 US-PATENT-APPL-SN-502124 US-PATENT-CLASS-250-281 US-PATENT-CLASS-250-287 US-PATENT-CLASS-250-288 US-PATENT-CLASS-250-385 US-PATENT-CLASS-250-423 US-PATENT-3,931,516
c37 N76-15457	US-PATENT-3,922,930 NASA-CASE-NFS-22022-1 US-PATENT-APPL-SN-405341 US-PATENT-CLASS-214-1CM US-PATENT-3,923,166	c37 N76-16446	NASA-CASE-NPO-13342-1 US-PATENT-APPL-SN-390049 NASA-CASE-NFS-22002-1 US-PATENT-APPL-SN-452769
c37 N76-15460	US-PATENT-3,923,166 NASA-CASE-LEW-11076-4 US-PATENT-APPL-SN-238264 US-PATENT-APPL-SN-346483 US-PATENT-APPL-SN-445178 US-PATENT-CLASS-308-9 US-PATENT-CLASS-308-72 US-PATENT-CLASS-308-73 US-PATENT-CLASS-308-122 US-PATENT-CLASS-308-160 US-PATENT-3,804,472 US-PATENT-3,830,552 US-PATENT-3,926,482	c44 N76-16612	
c44 N76-15573	NASA-CASE-NPO-13114-2 US-PATENT-APPL-SN-634214		
c44 N76-15603	NASA-CASE-LEW-12159-1 US-PATENT-APPL-SN-643041		
c54 N76-15792	NASA-CASE-MSC-12564-1 US-PATENT-APPL-SN-641862		
c72 N76-15860	NASA-CASE-LEW-11866-1 US-PATENT-APPL-SN-500980		

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-136-202		US-PATENT-APPL-SN-482967
	US-PATENT-CLASS-136-210		US-PATENT-CLASS-60-316
	US-PATENT-CLASS-165-105		US-PATENT-CLASS-244-23D
	US-PATENT-CLASS-310-4		US-PATENT-3,940,097
	US-PATENT-3,931,532	c34 N76-18374	NASA-CASE-NFS-22938-1
c44 N76-16621	NASA-CASE-MSC-12669-1		US-PATENT-APPL-SN-542754
	US-PATENT-APPL-SN-645503		US-PATENT-CLASS-250-335
c18 N76-17185	NASA-CASE-MSC-12561-1		US-PATENT-3,940,621
	US-PATENT-APPL-SN-448323	c35 N76-18400	NASA-CASE-LAR-10208-1
	US-PATENT-CLASS-244-162		US-PATENT-APPL-SN-483858
	US-PATENT-CLASS-244-172		US-PATENT-CLASS-73-95
	US-PATENT-3,929,306		US-PATENT-CLASS-73-103
c26 N76-17233	NASA-CASE-LEW-12095-1		US-PATENT-3,938,373
	US-PATENT-APPL-SN-651009	c35 N76-18401	NASA-CASE-NPO-13396-1
c34 N76-17317	NASA-CASE-LAR-10799-2		US-PATENT-APPL-SN-563283
	US-PATENT-APPL-SN-301419		US-PATENT-CLASS-55-261
	US-PATENT-APPL-SN-419319		US-PATENT-CLASS-73-28
	US-PATENT-CLASS-165-105		US-PATENT-CLASS-73-421.5R
	US-PATENT-CLASS-165-106		US-PATENT-3,938,367
	US-PATENT-CLASS-237-60	c35 N76-18402	NASA-CASE-NFS-22517-1
	US-PATENT-CLASS-244-117A		US-PATENT-APPL-SN-506804
	US-PATENT-CLASS-244-135R		US-PATENT-CLASS-350-3.5
	US-PATENT-CLASS-417-209		US-PATENT-3,937,555
	US-PATENT-3,929,305	c35 N76-18403	NASA-CASE-ARC-10322-1
c35 N76-17369	NASA-CASE-GSC-12088-1		US-PATENT-APPL-SN-484209
	US-PATENT-APPL-SN-648700		US-PATENT-CLASS-23-254EF
c39 N76-17427	NASA-CASE-NPO-13731-1		US-PATENT-3,938,956
	US-PATENT-APPL-SN-653681	c36 N76-18427	NASA-CASE-NPO-11945-1
c45 N76-17656	NASA-CASE-LAR-11675-1		US-PATENT-APPL-SN-269450
	US-PATENT-APPL-SN-557448		US-PATENT-CLASS-331-94.5
	US-PATENT-CLASS-178-DIG.1		US-PATENT-CLASS-332-7.51
	US-PATENT-CLASS-178-DIG.8		US-PATENT-CLASS-350-150
	US-PATENT-CLASS-178-6.8		US-PATENT-CLASS-350-160
	US-PATENT-CLASS-250-373		US-PATENT-CLASS-423-352
	US-PATENT-CLASS-340-237S		US-PATENT-CLASS-423-644
	US-PATENT-CLASS-356-207		US-PATENT-3,806,834
	US-PATENT-3,931,462	c36 N76-18428	NASA-CASE-NPO-13544-1
c75 N76-17551	NASA-CASE-NFS-22145-2		US-PATENT-APPL-SN-533555
	US-PATENT-APPL-SN-367606		US-PATENT-CLASS-331-94.5C
	US-PATENT-APPL-SN-500982		US-PATENT-CLASS-350-96W6
	US-PATENT-CLASS-89-8		US-PATENT-3,939,439
	US-PATENT-CLASS-124-1	c37 N76-18454	NASA-CASE-NFS-23047-1
	US-PATENT-CLASS-124-11R		US-PATENT-APPL-SN-521602
	US-PATENT-3,854,097		US-PATENT-CLASS-29-81D
	US-PATENT-3,929,119		US-PATENT-CLASS-72-453
c07 N76-18117	NASA-CASE-LAR-11674-1		US-PATENT-CLASS-73-399
	US-PATENT-APPL-SN-331759		US-PATENT-CLASS-173-132
	US-PATENT-APPL-SN-488616		US-PATENT-3,937,055
	US-PATENT-CLASS-181-33HC	c37 N76-18455	NASA-CASE-MSC-14435-1
	US-PATENT-CLASS-239-265.11		US-PATENT-APPL-SN-450500
	US-PATENT-3,938,742		US-PATENT-CLASS-228-193
c07 N76-18131	NASA-CASE-ARC-10812-1		US-PATENT-CLASS-228-206
	US-PATENT-APPL-SN-657903		US-PATENT-CLASS-228-214
c19 N76-18227	NASA-CASE-LAR-11889-1		US-PATENT-CLASS-228-238
	US-PATENT-APPL-SN-662182		US-PATENT-3,937,387
c25 N76-18245	NASA-CASE-NPO-13063-1	c37 N76-18456	NASA-CASE-LAR-11224-1
	US-PATENT-APPL-SN-227977		US-PATENT-APPL-SN-450502
	US-PATENT-CLASS-23-230H		US-PATENT-CLASS-19-205
	US-PATENT-CLASS-23-230B		US-PATENT-CLASS-134-21
	US-PATENT-CLASS-23-232C		US-PATENT-CLASS-134-37
	US-PATENT-CLASS-23-253R		US-PATENT-CLASS-209-250
	US-PATENT-CLASS-23-254R		US-PATENT-CLASS-209-300
	US-PATENT-CLASS-23-255R		US-PATENT-CLASS-209-305
	US-PATENT-CLASS-73-23.1		US-PATENT-3,937,661
	US-PATENT-CLASS-235-151.13	c37 N76-18457	NASA-CASE-NPO-13402-1
	US-PATENT-3,860,393		US-PATENT-APPL-SN-387342
c26 N76-18257	NASA-CASE-NFS-22907-1		US-PATENT-CLASS-123-DIG.12
	US-PATENT-APPL-SN-518546		US-PATENT-CLASS-123-89A
	US-PATENT-CLASS-324-34R		US-PATENT-CLASS-123-119B
	US-PATENT-3,938,037		US-PATENT-CLASS-123-120
c26 N76-18262	NASA-CASE-LEW-12083-1		US-PATENT-CLASS-123-121
	US-PATENT-APPL-SN-659882		US-PATENT-3,906,913
c32 N76-18295	NASA-CASE-GSC-11862-1	c37 N76-18458	NASA-CASE-LEW-11860-1
	US-PATENT-APPL-SN-500979		US-PATENT-APPL-SN-527728
	US-PATENT-CLASS-343-837		US-PATENT-CLASS-204-157.1R
	US-PATENT-CLASS-343-840		US-PATENT-CLASS-250-527
	US-PATENT-CLASS-343-912		US-PATENT-3,939,048
	US-PATENT-CLASS-343-915	c37 N76-18459	NASA-CASE-GSC-11551-1
	US-PATENT-3,938,162		US-PATENT-APPL-SN-440917
c33 N76-18345	NASA-CASE-NPO-13385-1		US-PATENT-CLASS-308-10
	US-PATENT-APPL-SN-501011		US-PATENT-3,937,533
	US-PATENT-CLASS-340-347AD	c44 N76-18641	NASA-CASE-NPO-13237-1
	US-PATENT-3,938,188		US-PATENT-APPL-SN-378127
c33 N76-18353	NASA-CASE-GSC-11925-1		US-PATENT-CLASS-136-83B
	US-PATENT-APPL-SN-538983		US-PATENT-CLASS-136-865
	US-PATENT-CLASS-360-26		US-PATENT-3,894,887
	US-PATENT-CLASS-360-51	c44 N76-18642	NASA-CASE-NPO-13464-1
	US-PATENT-3,938,182		US-PATENT-APPL-SN-428444
c34 N76-18364	NASA-CASE-LAR-11570-1		US-PATENT-CLASS-23-281

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-48-63				US-PATENT-3,943,763
	US-PATENT-CLASS-48-75	c20	N76-20215	.....	NASA-CASE-LEW-12147-1
	US-PATENT-CLASS-48-95				US-PATENT-APPL-SN-672210
	US-PATENT-CLASS-48-116	c37	N76-20480	.....	NASA-CASE-NPO-13059-1
	US-PATENT-CLASS-48-117				NASA-CASE-NPO-13436-1
	US-PATENT-CLASS-123-3				US-PATENT-APPL-SN-513690
	US-PATENT-CLASS-423-650				US-PATENT-CLASS-81-56
	US-PATENT-3,920,416				US-PATENT-CLASS-81-57.31
c44	N76-18643				US-PATENT-3,942,398
	NASA-CASE-NPO-11961-1	c37	N76-20485	.....	NASA-CASE-ARC-10917-1
	US-PATENT-APPL-SN-378126				US-PATENT-APPL-SN-672223
	US-PATENT-CLASS-136-617	c37	N76-20486	.....	NASA-CASE-LEW-11981-1
	US-PATENT-CLASS-136-30				US-PATENT-APPL-SN-672220
	US-PATENT-CLASS-320-21	c37	N76-20487	.....	NASA-CASE-LEW-11855-1
	US-PATENT-CLASS-320-22				US-PATENT-APPL-SN-672222
	US-PATENT-3,912,999	c37	N76-20488	.....	NASA-CASE-LEW-12119-1
c60	N76-18800				US-PATENT-APPL-SN-672219
	NASA-CASE-NPO-13067-1	c74	N76-20958	.....	NASA-CASE-ARC-10631-1
	US-PATENT-APPL-SN-274348				US-PATENT-APPL-SN-514546
	US-PATENT-CLASS-340-172.5				US-PATENT-CLASS-250-343
	US-PATENT-3,829,839				US-PATENT-CLASS-250-573
c60	N76-18803				US-PATENT-3,943,368
	NASA-CASE-GSC-11839-2	c76	N76-20994	.....	NASA-CASE-NPO-13443-1
	US-PATENT-APPL-SN-657996				US-PATENT-APPL-SN-522551
c71	N76-18886				US-PATENT-CLASS-324-60C
	NASA-CASE-NPO-13802-1				US-PATENT-CLASS-324-158D
	US-PATENT-APPL-SN-658133				US-PATENT-CLASS-324-158B
c74	N76-18913				US-PATENT-CLASS-324-158T
	NASA-CASE-GSC-11877-1				US-PATENT-3,943,442
	US-PATENT-APPL-SN-482953	c17	N76-21250	.....	NASA-CASE-MSC-12593-1
	US-PATENT-CLASS-235-184				US-PATENT-APPL-SN-419747
	US-PATENT-CLASS-250-199				US-PATENT-CLASS-325-14
	US-PATENT-3,937,945				US-PATENT-CLASS-343-100SA
c74	N76-18917				US-PATENT-CLASS-343-100ST
	NASA-CASE-HSC-12618-1				US-PATENT-CLASS-343-112TC
	US-PATENT-APPL-SN-651007				US-PATENT-3,949,400
c24	N76-19234				NASA-CASE-MFS-21311-1
	NASA-CASE-GSC-11577-3				US-PATENT-APPL-SN-493359
	US-PATENT-APPL-SN-645502				US-PATENT-CLASS-244-3.22
c33	N76-19338				US-PATENT-3,948,470
	NASA-CASE-NPO-13519-1	c20	N76-21275	.....	NASA-CASE-LEW-11876-1
	US-PATENT-APPL-SN-536761				US-PATENT-APPL-SN-542157
	US-PATENT-CLASS-33-155B				US-PATENT-CLASS-29-25.18
	US-PATENT-CLASS-33-174D				US-PATENT-3,947,933
	US-PATENT-CLASS-73-88.5SD	c32	N76-21365	.....	NASA-CASE-NPO-13568-1
	US-PATENT-CLASS-128-2S				US-PATENT-APPL-SN-534265
	US-PATENT-3,937,212				US-PATENT-CLASS-343-761
c33	N76-19339				US-PATENT-CLASS-343-781
	NASA-CASE-ARC-10810-1				US-PATENT-CLASS-343-786
	US-PATENT-APPL-SN-489009	c32	N76-21366	.....	US-PATENT-3,949,404
	US-PATENT-CLASS-204-195B				NASA-CASE-MFS-22729-1
	US-PATENT-CLASS-215-247				US-PATENT-APPL-SN-533608
	US-PATENT-CLASS-324-30B				US-PATENT-CLASS-235-156
	US-PATENT-3,938,035				US-PATENT-CLASS-325-42
c35	N76-19405				US-PATENT-CLASS-333-18
	NASA-CASE-MFS-23008-1				US-PATENT-3,949,206
	US-PATENT-APPL-SN-665734	c33	N76-21390	.....	NASA-CASE-ARC-10711-2
c35	N76-19407				US-PATENT-APPL-SN-493363
	NASA-CASE-LEW-12174-1				US-PATENT-APPL-SN-596788
	US-PATENT-APPL-SN-667929				US-PATENT-CLASS-73-398C
c35	N76-19408				US-PATENT-CLASS-317-246
	NASA-CASE-GSC-12032-2				US-PATENT-3,948,102
	US-PATENT-APPL-SN-578700	c37	N76-21554	.....	NASA-CASE-LAR-11465-1
c37	N76-19436				US-PATENT-APPL-SN-502137
	NASA-CASE-MFS-20607-1				US-PATENT-CLASS-33-16
	US-PATENT-APPL-SN-478800				US-PATENT-CLASS-33-174B
	US-PATENT-CLASS-222-145				US-PATENT-CLASS-156-286
	US-PATENT-CLASS-259-4AC				US-PATENT-CLASS-156-382
	US-PATENT-3,941,355				US-PATENT-CLASS-156-556
c37	N76-19437				US-PATENT-CLASS-248-362
	NASA-CASE-HSC-12615-1				US-PATENT-CLASS-248-363
	US-PATENT-APPL-SN-491417				US-PATENT-CLASS-269-21
	US-PATENT-CLASS-29-432				US-PATENT-3,945,879
	US-PATENT-CLASS-29-433	c45	N76-21742	.....	NASA-CASE-NPO-13474-1
	US-PATENT-CLASS-29-526				US-PATENT-APPL-SN-521817
	US-PATENT-CLASS-52-705				US-PATENT-CLASS-23-2542
	US-PATENT-CLASS-52-758F				US-PATENT-CLASS-250-574
	US-PATENT-CLASS-244-117A				US-PATENT-CLASS-356-37
	US-PATENT-CLASS-244-163				US-PATENT-3,945,801
	US-PATENT-3,936,927	c60	N76-21914	.....	NASA-CASE-NPO-13139-1
c44	N76-19552				US-PATENT-APPL-SN-393524
	NASA-CASE-LEW-12363-1				US-PATENT-CLASS-235-153AB
	US-PATENT-APPL-SN-665034				US-PATENT-CLASS-340-172.5
c52	N76-19785				US-PATENT-3,950,729
	NASA-CASE-LAR-11667-1				NASA-CASE-LAR-10585-1
	US-PATENT-APPL-SN-583487				US-PATENT-APPL-SN-197183
	US-PATENT-CLASS-128-DIG.20				US-PATENT-CLASS-244-35B
	US-PATENT-CLASS-128-26	c02	N76-22154	.....	US-PATENT-CLASS-244-408
	US-PATENT-3,937,215				US-PATENT-3,952,971
c66	N76-19888				
	NASA-CASE-MFS-22631-1				
	US-PATENT-APPL-SN-531572				
	US-PATENT-CLASS-340-38F				
	US-PATENT-CLASS-356-71				
	US-PATENT-CLASS-356-162				
	US-PATENT-CLASS-356-167				
	US-PATENT-3,930,735				
c74	N76-19935				
	NASA-CASE-MFS-21672-1				
	US-PATENT-APPL-SN-354060				
	US-PATENT-CLASS-356-123				
	US-PATENT-CLASS-356-124				
	US-PATENT-3,938,892				
c04	N76-20114				
	NASA-CASE-LAR-11387-1				
	US-PATENT-APPL-SN-531647				
	US-PATENT-CLASS-33-356				
	US-PATENT-CLASS-75-178B				

ACCESSION NUMBER INDEX

c07 N76-22158	NASA-CASE-LEW-12417-1 US-PATENT-APPL-SN-674340	c25 N76-23387	NASA-CASE-HSC-14831-1 US-PATENT-APPL-SN-685027
c07 N76-22202	NASA-CASE-LAR-11919-1 US-PATENT-APPL-SN-672221	c27 N76-23426	NASA-CASE-HSC-14270-2 US-PATENT-APPL-SN-482105
c17 N76-22245	NASA-CASE-GSC-11868-1 US-PATENT-APPL-SN-565290 US-PATENT-CLASS-178-69.5 US-PATENT-CLASS-328-155 US-PATENT-CLASS-340-1475Y US-PATENT-CLASS-340-207P US-PATENT-3,953,674		US-PATENT-CLASS-106-54 US-PATENT-CLASS-427-376 US-PATENT-CLASS-427-379 US-PATENT-CLASS-427-380 US-PATENT-CLASS-427-402 US-PATENT-CLASS-428-332 US-PATENT-CLASS-428-428 US-PATENT-CLASS-428-450 US-PATENT-CLASS-428-538 US-PATENT-CLASS-428-920 US-PATENT-3,955,034
c19 N76-22284	NASA-CASE-MFS-22905-1 US-PATENT-APPL-SN-518545 US-PATENT-CLASS-188-1B US-PATENT-CLASS-248-22 US-PATENT-CLASS-248-358R US-PATENT-3,952,980	c27 N76-23436	NASA-CASE-LAR-11902-1 US-PATENT-APPL-SN-672695
c20 N76-22296	NASA-CASE-MFS-19220-1 US-PATENT-APPL-SN-571821 US-PATENT-CLASS-89-1.801 US-PATENT-CLASS-254-93R US-PATENT-CLASS-254-124 US-PATENT-3,952,998	c33 N76-23482	NASA-CASE-GSC-12010-1 US-PATENT-APPL-SN-680958
c24 N76-22309	NASA-CASE-LEW-11930-1 US-PATENT-APPL-SN-513611 US-PATENT-CLASS-252-12 US-PATENT-3,953,343	c33 N76-23483	NASA-CASE-MFS-23186-1 US-PATENT-APPL-SN-684810
c25 N76-22323	NASA-CASE-ARC-10760-1 US-PATENT-APPL-SN-526438 US-PATENT-CLASS-250-343 US-PATENT-CLASS-250-344 US-PATENT-CLASS-250-432R US-PATENT-3,953,734	c34 N76-23522	NASA-CASE-KLA-8914-2 US-PATENT-APPL-SN-662181
c27 N76-22376	NASA-CASE-ARC-10721-1 US-PATENT-APPL-SN-427775 US-PATENT-CLASS-264-60 US-PATENT-CLASS-264-63 US-PATENT-CLASS-264-66 US-PATENT-3,952,083	c37 N76-23570	NASA-CASE-LEW-11169-1 US-PATENT-APPL-SN-446568 US-PATENT-CLASS-164-132 US-PATENT-3,957,104
c27 N76-22377	NASA-CASE-HSC-14270-1 US-PATENT-APPL-SN-482104 US-PATENT-CLASS-106-54 US-PATENT-CLASS-427-376 US-PATENT-CLASS-427-379 US-PATENT-CLASS-427-380 US-PATENT-CLASS-427-402 US-PATENT-CLASS-428-332 US-PATENT-CLASS-428-428 US-PATENT-CLASS-428-450 US-PATENT-CLASS-428-538 US-PATENT-CLASS-428-920 US-PATENT-3,953,646	c37 N76-23585	NASA-CASE-HSC-19568-1 US-PATENT-APPL-SN-681000
c28 N76-22399	NASA-CASE-LEW-12081-1 US-PATENT-APPL-SN-676432	c43 N76-23671	NASA-CASE-GSC-11976-1 US-PATENT-APPL-SN-677352
c35 N76-22509	NASA-CASE-LAR-11434-1 US-PATENT-APPL-SN-464722 US-PATENT-CLASS-209-127R US-PATENT-CLASS-317-246 US-PATENT-CLASS-324-61R US-PATENT-CLASS-324-71CP US-PATENT-3,953,792	c44 N76-23675	NASA-CASE-MFS-21628-2 US-PATENT-APPL-SN-421702 US-PATENT-APPL-SN-561020 US-PATENT-CLASS-126-270 US-PATENT-CLASS-165-133 US-PATENT-3,903,699 US-PATENT-3,957,030
c37 N76-22540	NASA-CASE-MFS-22636-1 US-PATENT-APPL-SN-536762 US-PATENT-CLASS-114-16.6 US-PATENT-CLASS-244-137P US-PATENT-CLASS-244-158 US-PATENT-CLASS-244-161 US-PATENT-3,952,976	c44 N76-23713	NASA-CASE-LEW-12039-1 US-PATENT-APPL-SN-687822
c37 N76-22541	NASA-CASE-LEW-11676-1 US-PATENT-APPL-SN-551184 US-PATENT-CLASS-277-4 US-PATENT-CLASS-277-41 US-PATENT-CLASS-277-74 US-PATENT-CLASS-277-93R US-PATENT-3,953,038	c52 N76-23837	NASA-CASE-LEW-12668-1 US-PATENT-APPL-SN-677353
c44 N76-22657	NASA-CASE-MFS-22743-1 US-PATENT-APPL-SN-518684 US-PATENT-CLASS-126-271 US-PATENT-3,951,129	c60 N76-23850	NASA-CASE-HSC-14082-1 US-PATENT-APPL-SN-315070 US-PATENT-CLASS-340-347DD US-PATENT-CLASS-340-347P US-PATENT-3,958,248
c54 N76-22914	NASA-CASE-GSC-12082-1 US-PATENT-APPL-SN-676958	c74 N76-23985	NASA-CASE-LAR-11711-1 US-PATENT-APPL-SN-674195
c74 N76-22593	NASA-CASE-ARC-10932-1 US-PATENT-APPL-SN-681001	c75 N76-24001	NASA-CASE-MFS-22906-1 US-PATENT-APPL-SN-684807
c09 N76-23273	NASA-CASE-MFS-23099-1 US-PATENT-APPL-SN-607969 US-PATENT-CLASS-73-147 US-PATENT-3,952,590	c09 N76-24280	NASA-CASE-ARC-10808-1 US-PATENT-APPL-SN-505881 US-PATENT-CLASS-35-12W US-PATENT-CLASS-178-FIG.35 US-PATENT-CLASS-178-7.89 US-PATENT-3,956,833
c24 N76-23359	NASA-CASE-LEW-12554-1 US-PATENT-APPL-SN-686449	c24 N76-24363	NASA-CASE-GSC-11786-1 US-PATENT-APPL-SN-401919 US-PATENT-CLASS-106-306 US-PATENT-CLASS-250-372 US-PATENT-CLASS-252-300 US-PATENT-CLASS-350-1 US-PATENT-3,957,675
		c27 N76-24405	NASA-CASE-HSC-14331-1 US-PATENT-APPL-SN-374421 US-PATENT-CLASS-106-15FP US-PATENT-CLASS-260-DIG.24 US-PATENT-CLASS-260-33.8F US-PATENT-CLASS-260-45.7 US-PATENT-CLASS-260-92.1 US-PATENT-CLASS-526-1 US-PATENT-CLASS-526-255 US-PATENT-3,956,243
		c27 N76-24408	NASA-CASE-HSC-14331-2 US-PATENT-APPL-SN-657907
		c27 N76-24409	NASA-CASE-HSC-14331-3 US-PATENT-APPL-SN-657998
		c35 N76-24523	NASA-CASE-LAR-11500-1 US-PATENT-APPL-SN-534266 US-PATENT-CLASS-73-1E US-PATENT-CLASS-73-15.6 US-PATENT-3,956,919
		c35 N76-24524	NASA-CASE-MFO-13462-1 US-PATENT-APPL-SN-545282 US-PATENT-CLASS-73-189 US-PATENT-CLASS-73-204 US-PATENT-3,956,932
		c35 N76-24525	NASA-CASE-ARC-10816-1

ACCESSION NUMBER INDEX

	US-PATENT-APPL-SN-552454		US-PATENT-APPL-SN-340863
	US-PATENT-CLASS-128-DIG.4		US-PATENT-CLASS-176-11
	US-PATENT-CLASS-128-2.12		US-PATENT-CLASS-176-16
	US-PATENT-CLASS-128-2.12		US-PATENT-CLASS-423-249
	US-PATENT-CLASS-128-2.057		US-PATENT-3,966,547
c35 N76-24529	US-PATENT-3,957,037	c33 N76-27472	NASA-CASE-GSC-11924-1
	NASA-CASE-HFS-23114-1		US-PATENT-APPL-SN-584318
c36 N76-24553	US-PATENT-APPL-SN-686331		US-PATENT-CLASS-343-755
	NASA-CASE-NPO-13531-1		US-PATENT-CLASS-343-779
	US-PATENT-APPL-SN-531565		US-PATENT-CLASS-343-854
	US-PATENT-CLASS-331-94.5C		US-PATENT-3,965,475
	US-PATENT-CLASS-350-96W6	c33 N76-27473	NASA-CASE-HQN-10876-1
	US-PATENT-3,958,188		US-PATENT-APPL-SN-555336
c37 N76-24575	NASA-CASE-LAR-10073-1		US-PATENT-CLASS-250-336
	US-PATENT-APPL-SN-436317		US-PATENT-CLASS-250-372
	US-PATENT-CLASS-156-242		US-PATENT-3,965,354
	US-PATENT-CLASS-156-286	c34 N76-27515	NASA-CASE-NPO-13391-1
	US-PATENT-CLASS-264-102		US-PATENT-APPL-SN-446567
	US-PATENT-CLASS-264-267		US-PATENT-CLASS-29-182
	US-PATENT-CLASS-428-117		US-PATENT-CLASS-29-193
	US-PATENT-3,956,050		US-PATENT-CLASS-55-52J
c44 N76-24696	NASA-CASE-HFS-22744-1		US-PATENT-CLASS-55-526
	US-PATENT-APPL-SN-518544		US-PATENT-CLASS-75-225
	US-PATENT-CLASS-126-270		US-PATENT-CLASS-165-105
	US-PATENT-CLASS-126-271		US-PATENT-3,964,902
	US-PATENT-CLASS-350-293	c34 N76-27517	NASA-CASE-ABC-10755-2
	US-PATENT-CLASS-350-299		US-PATENT-APPL-SN-424013
	US-PATENT-3,958,553		US-PATENT-APPL-SN-545284
c54 N76-24900	NASA-CASE-HSC-14733-1		US-PATENT-CLASS-73-147
	NASA-CASE-HSC-14735-1		US-PATENT-CLASS-73-189
	US-PATENT-APPL-SN-522971		US-PATENT-CLASS-73-194B
	US-PATENT-CLASS-128-142.2		US-PATENT-3,964,306
	US-PATENT-CLASS-128-203	c37 N76-27567	NASA-CASE-LAR-11709-1
	US-PATENT-CLASS-137-DIG.9		US-PATENT-APPL-SN-548468
	US-PATENT-CLASS-137-110		US-PATENT-CLASS-339-17H
	US-PATENT-3,957,044		US-PATENT-CLASS-339-18C
c76 N76-25049	NASA-CASE-LEW-12094-1	c37 N76-27568	US-PATENT-3,964,813
	US-PATENT-APPL-SN-508784		NASA-CASE-LAR-11726-1
	US-PATENT-CLASS-148-175		US-PATENT-APPL-SN-538047
	US-PATENT-CLASS-156-610		US-PATENT-CLASS-219-92
	US-PATENT-CLASS-156-612		US-PATENT-CLASS-219-118
	US-PATENT-CLASS-156-613		US-PATENT-3,967,091
	US-PATENT-CLASS-252-62.3	c44 N76-27664	NASA-CASE-HFS-23059-1
	US-PATENT-CLASS-423-345		US-PATENT-APPL-SN-537024
	US-PATENT-CLASS-423-346		US-PATENT-CLASS-156-86A
	US-PATENT-3,956,032		US-PATENT-3,964,928
c04 N76-26175	NASA-CASE-HFS-23551-1	c52 N76-27839	NASA-CASE-HSC-14836-1
	US-PATENT-APPL-SN-114772		US-PATENT-APPL-SN-691647
	US-PATENT-CLASS-74-5.34	c72 N76-27967	NASA-CASE-LEW-12465-1
	US-PATENT-CLASS-244-79		US-PATENT-APPL-SN-694413
	US-PATENT-3,739,646	c27 N76-28421	NASA-CASE-ARC-11008-1
c09 N76-26224	NASA-CASE-ARC-10971-1		US-PATENT-APPL-SN-708951
	US-PATENT-APPL-SN-694402	c27 N76-28425	NASA-CASE-HSC-14903-1
c24 N76-26281	NASA-CASE-NPO-13764-1		US-PATENT-APPL-SN-706424
	US-PATENT-APPL-SN-674194	c33 N76-28471	NASA-CASE-HFS-23280-1
c24 N76-26282	NASA-CASE-LEW-11930-2		US-PATENT-APPL-SN-706425
	US-PATENT-APPL-SN-616528	c33 N76-28472	NASA-CASE-LEW-12277-1
c24 N76-26284	NASA-CASE-LAR-11756-1		US-PATENT-APPL-SN-708659
	US-PATENT-APPL-SN-688879	c35 N76-28530	NASA-CASE-LAR-11490-1
c24 N76-26286	NASA-CASE-ARC-10913-1		US-PATENT-APPL-SN-707125
	US-PATENT-APPL-SN-698646	c35 N76-28535	NASA-CASE-ARC-11046-1
c33 N76-26393	NASA-CASE-NPO-13832-1		US-PATENT-APPL-SN-712419
	US-PATENT-APPL-SN-684809	c37 N76-28554	NASA-CASE-HFS-23311-1
c33 N76-26394	NASA-CASE-HFS-23312-1		US-PATENT-APPL-SN-708800
	US-PATENT-APPL-SN-699012	c38 N76-28563	NASA-CASE-NPO-12142-1
c35 N76-26448	NASA-CASE-HSC-14805-1		US-PATENT-APPL-SN-637249
	US-PATENT-APPL-SN-688856		US-PATENT-CLASS-73-88.5
c35 N76-26449	NASA-CASE-HFS-23461-1		US-PATENT-3,945,262
	US-PATENT-APPL-SN-694406	c44 N76-28635	NASA-CASE-GSC-12022-1
c35 N76-26450	NASA-CASE-NPO-13772-1		NASA-CASE-GSC-12023-1
	US-PATENT-APPL-SN-676351		US-PATENT-APPL-SN-576488
c37 N76-26511	NASA-CASE-HSC-12731-1		US-PATENT-CLASS-29-572
	US-PATENT-APPL-SN-690816		US-PATENT-CLASS-136-89
c44 N76-26690	NASA-CASE-NPO-13734-1		US-PATENT-CLASS-148-174
	US-PATENT-APPL-SN-680939		US-PATENT-CLASS-148-175
c44 N76-26692	NASA-CASE-NPO-13821-1		US-PATENT-CLASS-156-612
	US-PATENT-APPL-SN-688852		US-PATENT-CLASS-156-61J
c44 N76-26695	NASA-CASE-GSC-12022-2		US-PATENT-CLASS-156-614
	US-PATENT-APPL-SN-693074		US-PATENT-CLASS-357-30
c54 N76-26871	NASA-CASE-ARC-10916-1		US-PATENT-CLASS-357-59
	US-PATENT-APPL-SN-701408		US-PATENT-CLASS-427-86
c74 N76-26988	NASA-CASE-HFS-22409-2		US-PATENT-CLASS-427-113
	US-PATENT-APPL-SN-636193		US-PATENT-CLASS-427-248
c07 N76-27232	NASA-CASE-LAR-11476-1		US-PATENT-CLASS-427-249
	US-PATENT-APPL-SN-592159		US-PATENT-CLASS-427-250
	US-PATENT-CLASS-73-557		US-PATENT-3,961,997
	US-PATENT-3,964,319	c44 N76-28646	NASA-CASE-LEW-11871-1
c25 N76-27383	NASA-CASE-LEW-11390-2		US-PATENT-APPL-SN-708660
	US-PATENT-APPL-SN-247434	c05 N76-29217	NASA-CASE-ARC-10470-3

ACCESSION NUMBER INDEX

	US-PATENT-APPL-SN-206279	c51 N76-29891	NASA-CASE-GSC-11917-2
	US-PATENT-APPL-SN-321180		US-PATENT-APPL-SN-475337
	US-PATENT-APPL-SN-496779		US-PATENT-APPL-SN-555647
	US-PATENT-CLASS-204-46		US-PATENT-CLASS-195-103.5B
	US-PATENT-3,737,121		US-PATENT-3,971,703
c17 N76-29347	US-PATENT-3,971,535	c52 N76-29894	NASA-CASE-ARC-10583-1
	NASA-CASE-ARC-10849-1		US-PATENT-APPL-SN-301418
	US-PATENT-APPL-SN-563049		US-PATENT-CLASS-128-2.1A
	US-PATENT-CLASS-73-493		US-PATENT-CLASS-128-2B
	US-PATENT-CLASS-73-517R		US-PATENT-CLASS-128-2P
	US-PATENT-CLASS-340-189H		US-PATENT-3,971,362
	US-PATENT-CLASS-340-206	c52 N76-29895	NASA-CASE-NPO-13644-1
	US-PATENT-3,972,038		US-PATENT-APPL-SN-574218
c20 N76-29365	NASA-CASE-LAR-12018-1		US-PATENT-CLASS-128-2.05B
	US-PATENT-APPL-SN-678520		US-PATENT-CLASS-128-2S
c25 N76-29379	NASA-CASE-LBW-11390-3		US-PATENT-CLASS-338-6
	US-PATENT-APPL-SN-247434		US-PATENT-3,971,363
	US-PATENT-APPL-SN-380046	c52 N76-29896	NASA-CASE-NPO-13643-1
	US-PATENT-CLASS-176-11		US-PATENT-APPL-SN-578241
	US-PATENT-CLASS-176-14		US-PATENT-CLASS-73-398AB
	US-PATENT-CLASS-176-16		US-PATENT-CLASS-128-2.05E
	US-PATENT-CLASS-250-400		US-PATENT-CLASS-128-2.06E
	US-PATENT-CLASS-250-429		US-PATENT-CLASS-128-2S
	US-PATENT-CLASS-250-492R		US-PATENT-CLASS-128-418
	US-PATENT-3,971,697		US-PATENT-CLASS-128-419F
c26 N76-29401	NASA-CASE-HSC-19693-1		US-PATENT-3,971,364
	US-PATENT-APPL-SN-708771	c74 N76-30053	NASA-CASE-GSC-11782-1
c35 N76-29551	NASA-CASE-LAR-10907-1		US-PATENT-APPL-SN-463925
	US-PATENT-APPL-SN-559845		US-PATENT-CLASS-250-199
	US-PATENT-CLASS-250-340		US-PATENT-3,971,930
	US-PATENT-CLASS-250-353	c76 N76-30084	NASA-CASE-HFS-23274-1
	US-PATENT-3,971,940		US-PATENT-APPL-SN-714158
c35 N76-29552	NASA-CASE-HSC-12617-1	c91 N76-30131	NASA-CASE-HSC-12423-1
	US-PATENT-APPL-SN-513576		US-PATENT-APPL-SN-448320
	US-PATENT-CLASS-235-61NV		US-PATENT-CLASS-73-170R
	US-PATENT-CLASS-235-78H		US-PATENT-CLASS-73-425.2
	US-PATENT-CLASS-235-88H		US-PATENT-CLASS-73-432R
	US-PATENT-3,971,915		US-PATENT-3,971,256
c36 N76-29575	NASA-CASE-NPO-13346-1	c44 N76-30652	NASA-CASE-GSC-12030-1
	US-PATENT-APPL-SN-533556		US-PATENT-APPL-SN-710035
	US-PATENT-CLASS-330-4.3	c52 N76-30793	NASA-CASE-ARC-10329-2
	US-PATENT-CLASS-331-94.5C		NASA-CASE-RE-ARC-10329-2
	US-PATENT-3,972,008		US-PATENT-APPL-SN-159857
c37 N76-29588	NASA-CASE-LBW-11949-1		US-PATENT-APPL-SN-452768
	US-PATENT-APPL-SN-590182		US-PATENT-CLASS-351-23
	US-PATENT-CLASS-308-160		US-PATENT-CLASS-351-30
	US-PATENT-CLASS-308-163		US-PATENT-CLASS-351-36
	US-PATENT-CLASS-308-170		US-PATENT-RE-28,921
	US-PATENT-3,971,602		US-PATENT-3,737,214
c37 N76-29590	NASA-CASE-NPO-13613-1	c05 N76-31219	NASA-CASE-LAR-11932-1
	US-PATENT-APPL-SN-574208		US-PATENT-APPL-SN-718244
	US-PATENT-CLASS-62-6	c06 N76-31229	NASA-CASE-LAR-11833-1
	US-PATENT-3,971,230		US-PATENT-APPL-SN-725828
c44 N76-29699	NASA-CASE-EQN-10862-1	c31 N76-31365	NASA-CASE-ARC-10445-1
	US-PATENT-APPL-SN-604374		US-PATENT-APPL-SN-491418
	US-PATENT-CLASS-136-30		US-PATENT-CLASS-313-250
	US-PATENT-CLASS-136-143		US-PATENT-CLASS-313-306
	US-PATENT-3,972,727		US-PATENT-CLASS-313-309
c44 N76-29700	NASA-CASE-NPO-13342-2		US-PATENT-CLASS-313-338
	US-PATENT-APPL-SN-390049		US-PATENT-3,978,364
	US-PATENT-APPL-SN-548559	c32 N76-31372	NASA-CASE-NPO-13465-1
	US-PATENT-CLASS-23-281		US-PATENT-APPL-SN-531575
	US-PATENT-CLASS-48-95		US-PATENT-CLASS-179-1SA
	US-PATENT-CLASS-123-1A		US-PATENT-3,978,287
	US-PATENT-CLASS-123-3	c32 N76-31373	NASA-CASE-NPO-13836-1
	US-PATENT-CLASS-423-650		US-PATENT-APPL-SN-699002
	US-PATENT-3,955,941	c33 N76-31409	NASA-CASE-NPO-12134-1
c44 N76-29701	NASA-CASE-NPO-13567-1		US-PATENT-APPL-SN-536785
	US-PATENT-APPL-SN-566493		US-PATENT-CLASS-313-94
	US-PATENT-CLASS-60-517		US-PATENT-CLASS-357-63
	US-PATENT-CLASS-62-6		US-PATENT-3,978,360
	US-PATENT-CLASS-417-141	c33 N76-31410	NASA-CASE-HFS-22880-1
	US-PATENT-CLASS-417-207		US-PATENT-APPL-SN-557444
	US-PATENT-CLASS-417-209		US-PATENT-CLASS-307-255
	US-PATENT-CLASS-417-379		US-PATENT-CLASS-307-300
	US-PATENT-3,972,651		US-PATENT-CLASS-307-313
c44 N76-29704	NASA-CASE-NPO-13464-2		US-PATENT-CLASS-307-315
	US-PATENT-APPL-SN-428444		US-PATENT-3,978,350
	US-PATENT-APPL-SN-553687	c35 N76-31489	NASA-CASE-GSC-11893-1
	US-PATENT-CLASS-42-215		US-PATENT-APPL-SN-585420
	US-PATENT-CLASS-48-197R		US-PATENT-CLASS-73-9
	US-PATENT-CLASS-252-373		US-PATENT-3,977,231
	US-PATENT-CLASS-423-650	c35 N76-31490	NASA-CASE-NPO-13604-1
	US-PATENT-CLASS-431-4		US-PATENT-APPL-SN-574219
	US-PATENT-CLASS-431-163		US-PATENT-CLASS-356-106S
	US-PATENT-CLASS-431-210		US-PATENT-CLASS-356-114
	US-PATENT-3,920,416		US-PATENT-CLASS-356-209
	US-PATENT-3,971,847		US-PATENT-CLASS-356-244
			US-PATENT-3,977,787

ACCESSION NUMBER INDEX

c36 N76-31512	NASA-CASE-NPO-13490-1 US-PATENT-APPL-SN-549418 US-PATENT-CLASS-330-4 US-PATENT-CLASS-331-94 US-PATENT-3,978,417	c35 N76-33469	NASA-CASE-NFS-23363-1 US-PATENT-APPL-SN-730046
c36 N76-31514	NASA-CASE-NPO-13801-1 US-PATENT-APPL-SN-708796	c35 N76-33470	NASA-CASE-LAB-10344-1 US-PATENT-APPL-SN-730779
c37 N76-31524	NASA-CASE-NPO-13535-1 US-PATENT-APPL-SN-563050 US-PATENT-CLASS-264-129 US-PATENT-CLASS-264-161 US-PATENT-CLASS-264-219 US-PATENT-CLASS-264-304 US-PATENT-CLASS-264-305 US-PATENT-CLASS-264-308 US-PATENT-CLASS-264-310 US-PATENT-CLASS-264-318 US-PATENT-CLASS-264-334 US-PATENT-CLASS-427-230 US-PATENT-3,978,187	c44 N76-33624	NASA-CASE-LBN-11330-2 US-PATENT-APPL-SN-727725
c37 N76-31529	NASA-CASE-MSC-19666-1 US-PATENT-APPL-SN-721150	c52 N76-33835	NASA-CASE-ARC-10994-1 US-PATENT-APPL-SN-728369
c39 N76-31562	NASA-CASE-MSC-19372-1 US-PATENT-APPL-SN-517995 US-PATENT-CLASS-29-467 US-PATENT-CLASS-29-526 US-PATENT-CLASS-52-236 US-PATENT-CLASS-52-637 US-PATENT-CLASS-52-648 US-PATENT-CLASS-52-651 US-PATENT-CLASS-52-726 US-PATENT-CLASS-52-745 US-PATENT-CLASS-52-749 US-PATENT-CLASS-182-178 US-PATENT-3,977,147	c02 N77-10001	NASA-CASE-LAR-11645-1 US-PATENT-APPL-SN-473973 US-PATENT-CLASS-244-113 US-PATENT-CLASS-244-130 US-PATENT-3,984,070
c44 N76-31666	NASA-CASE-NPO-13087-2 US-PATENT-APPL-SN-296622 US-PATENT-APPL-SN-462341 US-PATENT-CLASS-136-89 US-PATENT-CLASS-136-206 US-PATENT-3,966,499	c09 N77-10071	NASA-CASE-NPO-13528-1 US-PATENT-APPL-SN-521620 US-PATENT-CLASS-73-147 US-PATENT-3,983,749
c44 N76-31667	NASA-CASE-NFS-23167-1 US-PATENT-APPL-SN-602618 US-PATENT-CLASS-60-659 US-PATENT-CLASS-165-10 US-PATENT-3,977,197	c15 N77-10112	NASA-CASE-NFS-20855-1 US-PATENT-APPL-SN-243374 US-PATENT-CLASS-244-1SD US-PATENT-3,744,739
c44 N76-31674	NASA-CASE-LBN-12649-1 US-PATENT-APPL-SN-720521	c15 N77-10113	NASA-CASE-NFS-22787-1 US-PATENT-APPL-SN-511346 US-PATENT-CLASS-244-3.21 US-PATENT-CLASS-244-169 US-PATENT-CLASS-244-171 US-PATENT-3,984,072
c45 N76-31714	NASA-CASE-LAR-11405-1 US-PATENT-APPL-SN-537480 US-PATENT-CLASS-23-230R US-PATENT-CLASS-23-232E US-PATENT-CLASS-23-232E US-PATENT-3,977,831	c20 N77-10148	NASA-CASE-LBN-12082-1 US-PATENT-APPL-SN-612964 US-PATENT-CLASS-60-202 US-PATENT-CLASS-313-231.4 US-PATENT-CLASS-313-240 US-PATENT-CLASS-313-361 US-PATENT-CLASS-315-111.3 US-PATENT-3,983,695
c62 N76-31946	NASA-CASE-GSC-12115-1 US-PATENT-APPL-SN-262596 US-PATENT-CLASS-340-347SI US-PATENT-3,976,997	c27 N77-10198	NASA-CASE-LAR-12147-1 US-PATENT-APPL-SN-733825
c74 N76-31998	NASA-CASE-MSC-12640-1 US-PATENT-APPL-SN-591568 US-PATENT-CLASS-350-162SF US-PATENT-3,977,771	c27 N77-10201	NASA-CASE-ARC-11051-1 US-PATENT-APPL-SN-726910
c76 N76-32029	NASA-CASE-NFS-23315-1 US-PATENT-APPL-SN-724874	c28 N77-10213	NASA-CASE-LAR-11995-1 US-PATENT-APPL-SN-238826 US-PATENT-CLASS-86-1R US-PATENT-CLASS-102-99 US-PATENT-CLASS-264-3R US-PATENT-3,983,780
c03 N76-32140	NASA-CASE-NFS-16609-3 US-PATENT-APPL-SN-82279 US-PATENT-APPL-SN-307714 US-PATENT-APPL-SN-511894 US-PATENT-CLASS-325-114 US-PATENT-CLASS-325-115 US-PATENT-CLASS-325-186 US-PATENT-CLASS-343-705 US-PATENT-3,978,410	c31 N77-10229	NASA-CASE-NPO-13459-1 US-PATENT-APPL-SN-598967 US-PATENT-CLASS-62-217 US-PATENT-CLASS-62-514JT US-PATENT-3,983,714
c27 N76-32315	NASA-CASE-ARC-10592-2 US-PATENT-APPL-SN-321179 US-PATENT-APPL-SN-414043 US-PATENT-CLASS-260-2406 US-PATENT-CLASS-260-566B US-PATENT-3,803,090 US-PATENT-3,965,096	c32 N77-10392	NASA-CASE-LAR-11827-1 US-PATENT-APPL-SN-414379 US-PATENT-APPL-SN-561764 US-PATENT-CLASS-178-88 US-PATENT-CLASS-235-150.1 US-PATENT-CLASS-235-156 US-PATENT-CLASS-325-323 US-PATENT-CLASS-325-349 US-PATENT-CLASS-325-476 US-PATENT-3,984,634
c33 N76-32457	NASA-CASE-NPO-13553-1 US-PATENT-APPL-SN-616333 US-PATENT-CLASS-343-882 US-PATENT-CLASS-343-915 US-PATENT-3,978,490	c33 N77-10428	NASA-CASE-NPO-13512-1 US-PATENT-APPL-SN-533734 US-PATENT-CLASS-321-2 US-PATENT-CLASS-321-19 US-PATENT-CLASS-323-DIG.1 US-PATENT-CLASS-323-17 US-PATENT-CLASS-323-22T US-PATENT-CLASS-323-23 US-PATENT-3,984,799
c44 N76-32645	NASA-CASE-LAR-12009-1 US-PATENT-APPL-SN-717320	c33 N77-10429	NASA-CASE-GSC-11963-1 US-PATENT-APPL-SN-595197 US-PATENT-CLASS-244-1A US-PATENT-CLASS-244-42CG US-PATENT-CLASS-317-2D US-PATENT-CLASS-324-72 US-PATENT-3,984,730
c32 N76-33364	NASA-CASE-NFS-22234-1 US-PATENT-APPL-SN-730778	c34 N77-10463	NASA-CASE-NFS-22991-1 US-PATENT-APPL-SN-521006 US-PATENT-CLASS-165-164 US-PATENT-CLASS-165-170 US-PATENT-3,983,933
		c35 N77-10492	NASA-CASE-NPO-13479-1 US-PATENT-APPL-SN-500981 US-PATENT-CLASS-250-290 US-PATENT-CLASS-250-291 US-PATENT-3,984,681
		c35 N77-10493	NASA-CASE-NFS-23178-1 US-PATENT-APPL-SN-637247 US-PATENT-CLASS-250-338

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-250-339	c32 N77-12240	NASA-CASE-NPO-13543-1
	US-PATENT-CLASS-250-347		NASA-CASE-NPO-13545-1
	US-PATENT-CLASS-356-106R		US-PATENT-APPL-SN-589173
	US-PATENT-3,984,686		US-PATENT-CLASS-325-41
c35 N77-10497	NASA-CASE-LAR-11869-1		US-PATENT-CLASS-340-146.1A
	US-PATENT-APPL-SN-740155		US-PATENT-CLASS-340-146.1A
c35 N77-10498	NASA-CASE-ARC-10981-1		US-PATENT-CLASS-340-146.1A
	US-PATENT-APPL-SN-738218		US-PATENT-3,988,677
c36 N77-10516	NASA-CASE-NFS-19259-1	c32 N77-12247	NASA-CASE-GSC-12150-1
	US-PATENT-APPL-SN-732630		US-PATENT-APPL-SN-736286
c36 N77-10517	NASA-CASE-LAR-12012-1	c32 N77-12248	NASA-CASE-HSC-16170-1
	US-PATENT-APPL-SN-738219		US-PATENT-APPL-SN-737975
c43 N77-10584	NASA-CASE-HSC-14472-1	c34 N77-12332	NASA-CASE-LAR-11626-1
	US-PATENT-APPL-SN-502138		US-PATENT-APPL-SN-744542
	US-PATENT-CLASS-235-181	c37 N77-12402	NASA-CASE-NFS-23062-1
	US-PATENT-CLASS-340-146.3P		US-PATENT-APPL-SN-591569
	US-PATENT-CLASS-340-146.3Q		US-PATENT-CLASS-60-527
	US-PATENT-3,984,671		US-PATENT-3,987,636
c44 N77-10635	NASA-CASE-NFS-22458-1	c44 N77-12511	NASA-CASE-NFS-23270-1
	US-PATENT-APPL-SN-571458		US-PATENT-APPL-SN-744573
	US-PATENT-CLASS-29-572	c60 N77-12721	NASA-CASE-NPO-13428-1
	US-PATENT-CLASS-136-89		NASA-CASE-NPO-13447-1
	US-PATENT-3,984,256		US-PATENT-APPL-SN-495022
c44 N77-10636	NASA-CASE-NPO-13560-1		US-PATENT-CLASS-179-15BA
	NASA-CASE-NPO-13561-1		US-PATENT-CLASS-328-111
	US-PATENT-APPL-SN-487156		US-PATENT-CLASS-340-172.5
	US-PATENT-CLASS-23-281		US-PATENT-3,988,716
	US-PATENT-CLASS-48-61	c07 N77-13062	NASA-CASE-HSC-16000-1
	US-PATENT-CLASS-48-116		US-PATENT-APPL-SN-739915
	US-PATENT-CLASS-48-117	c27 N77-13217	NASA-CASE-NPO-13666-1
	US-PATENT-CLASS-48-197R		US-PATENT-APPL-SN-633877
	US-PATENT-CLASS-48-212		US-PATENT-CLASS-49-182.5
	US-PATENT-CLASS-123-3		US-PATENT-3,990,860
	US-PATENT-CLASS-252-373	c33 N77-13315	NASA-CASE-NPO-11515-1
	US-PATENT-CLASS-423-650		US-PATENT-APPL-SN-139596
	US-PATENT-CLASS-431-11		US-PATENT-CLASS-307-233
	US-PATENT-CLASS-431-41		US-PATENT-CLASS-307-295
	US-PATENT-CLASS-431-116		US-PATENT-CLASS-328-133
	US-PATENT-CLASS-431-162		US-PATENT-3,750,035
	US-PATENT-CLASS-431-170	c33 N77-13335	NASA-CASE-HSC-14916-1
	US-PATENT-3,982,910		US-PATENT-APPL-SN-739914
c47 N77-10753	NASA-CASE-NFS-23362-1	c33 N77-13338	NASA-CASE-HSC-12745-1
	US-PATENT-APPL-SN-637268		US-PATENT-APPL-SN-746579
	US-PATENT-CLASS-250-338	c37 N77-13418	NASA-CASE-ARC-10905-1
	US-PATENT-CLASS-250-339		US-PATENT-APPL-SN-618594
	US-PATENT-CLASS-250-347		US-PATENT-CLASS-219-300
	US-PATENT-CLASS-356-106R		US-PATENT-CLASS-219-304
	US-PATENT-3,984,685		US-PATENT-CLASS-239-171
c52 N77-10780	NASA-CASE-ARC-10855-1		US-PATENT-CLASS-252-359A
	US-PATENT-APPL-SN-617612		US-PATENT-3,990,987
	US-PATENT-CLASS-73-343R	c37 N77-13426	NASA-CASE-LRW-12785-1
	US-PATENT-CLASS-128-2H		US-PATENT-APPL-SN-739909
	US-PATENT-3,983,753	c07 N77-14025	NASA-CASE-LRW-12419-1
c74 N77-10899	NASA-CASE-HSC-19442-1		US-PATENT-APPL-SN-579375
	US-PATENT-APPL-SN-558600		US-PATENT-CLASS-60-226R
	US-PATENT-CLASS-356-237		US-PATENT-CLASS-416-15J
	US-PATENT-CLASS-356-239		US-PATENT-CLASS-416-160
	US-PATENT-3,985,454		US-PATENT-CLASS-416-162
c13 N77-11079	NASA-CASE-NFS-23564-1		US-PATENT-CLASS-416-165
	US-PATENT-APPL-SN-739908		US-PATENT-CLASS-416-167
c24 N77-11119	NASA-CASE-ARC-11042-1		US-PATENT-3,994,148
	US-PATENT-APPL-SN-734902	c27 N77-14262	NASA-CASE-HSC-16074-1
c32 N77-11269	NASA-CASE-NPO-13886-1		US-PATENT-APPL-SN-747674
	US-PATENT-APPL-SN-730045	c32 N77-14292	NASA-CASE-LAR-11607-1
c33 N77-11296	NASA-CASE-FRC-10090-1		US-PATENT-APPL-SN-617895
	US-PATENT-APPL-SN-737974		US-PATENT-CLASS-325-145
c35 N77-11363	NASA-CASE-NPO-13759-1		US-PATENT-CLASS-332-22
	US-PATENT-APPL-SN-718266		US-PATENT-CLASS-332-23E
c35 N77-11364	NASA-CASE-ARC-11036-1		US-PATENT-3,996,552
	US-PATENT-APPL-SN-740457	c33 N77-14333	NASA-CASE-GSC-11789-1
c37 N77-11397	NASA-CASE-LAR-11549-1		US-PATENT-APPL-SN-536982
	US-PATENT-APPL-SN-537979		US-PATENT-CLASS-317-31
	US-PATENT-CLASS-219-92		US-PATENT-CLASS-321-13
	US-PATENT-CLASS-219-118		US-PATENT-3,996,506
	US-PATENT-3,988,561	c33 N77-14334	NASA-CASE-GSC-12018-1
c37 N77-11398	NASA-CASE-NPO-13763-1		US-PATENT-APPL-SN-635531
	US-PATENT-APPL-SN-718268		US-PATENT-CLASS-329-122
c37 N77-11403	NASA-CASE-NFS-23447-1		US-PATENT-CLASS-329-124
	US-PATENT-APPL-SN-736909		US-PATENT-CLASS-331-23
c04 N77-12031	NASA-CASE-ARC-10990-1		US-PATENT-CLASS-331-36C
	US-PATENT-APPL-SN-749420		US-PATENT-CLASS-332-30V
c09 N77-12070	NASA-CASE-NFS-23460-1		US-PATENT-3,997,848
	US-PATENT-APPL-SN-746578	c33 N77-14335	NASA-CASE-NFS-22560-1
c25 N77-12157	NASA-CASE-ARC-10991-1		US-PATENT-APPL-SN-589233
	US-PATENT-APPL-SN-744574		US-PATENT-CLASS-250-214A
c32 N77-12239	NASA-CASE-HSC-12506-1		US-PATENT-CLASS-330-14
	US-PATENT-APPL-SN-545283		US-PATENT-CLASS-330-2E
	US-PATENT-CLASS-340-347DD		US-PATENT-CLASS-330-59
	US-PATENT-3,988,729		US-PATENT-3,996,462

ACCESSION NUMBER INDEX

c34 N77-14372	NASA-CASE-ABC-11043-1 US-PATENT-AEFL-SN-753964	US-PATENT-CLASS-350-968 US-PATENT-3,996,455
c35 N77-14406	NASA-CASE-NPO-13663-1 US-PATENT-AEFL-SN-634205 US-PATENT-CLASS-250-289 US-PATENT-CLASS-250-298 US-PATENT-3,996,464	c74 N77-14842 NASA-CASE-MPS-23513-1 US-PATENT-APPL-SN-755323
c35 N77-14407	NASA-CASE-IAB-11648-1 US-PATENT-AEFL-SN-645571 US-PATENT-CLASS-73-133R US-PATENT-3,995,476	c05 N77-15027 NASA-CASE-LAB-11852-1 US-PATENT-APPL-SN-742035
c35 N77-14408	NASA-CASE-ABC-10448-3 US-PATENT-AEFL-SN-221670 US-PATENT-AEFL-SN-318848 US-PATENT-CLASS-250-396 US-PATENT-3,996,468	c07 N77-15036 NASA-CASE-LAB-11903-1 US-PATENT-AEFL-SN-753971
c35 N77-14409	NASA-CASE-NPO-13540-1 US-PATENT-AEFL-SN-526450 US-PATENT-CLASS-136-232 US-PATENT-CLASS-136-233 US-PATENT-3,996,070	c24 N77-15103 NASA-CASE-LAB-11898-1 US-PATENT-AEFL-SN-723264
c35 N77-14411	NASA-CASE-NPO-13683-1 US-PATENT-AEFL-SN-599284 US-PATENT-CLASS-250-343 US-PATENT-CLASS-356-97 US-PATENT-CLASS-356-201 US-PATENT-CLASS-356-204 US-PATENT-3,995,960	c24 N77-15105 NASA-CASE-MPS-23506-1 US-PATENT-APPL-SN-760809
c37 N77-14477	NASA-CASE-FRC-10081-1 US-PATENT-AEFL-SN-598504 US-PATENT-CLASS-280-432 US-PATENT-3,995,877	c27 N77-15192 NASA-CASE-LAB-12181-1 US-PATENT-APPL-SN-734901
c37 N77-14478	NASA-CASE-IAB-11658-1 US-PATENT-AEFL-SN-625759 US-PATENT-CLASS-83-451 US-PATENT-CLASS-83-467R US-PATENT-3,995,522	c31 N77-15219 NASA-CASE-NPO-13839-1 US-PATENT-AEFL-SN-712981
c37 N77-14479	NASA-CASE-GSC-11960-1 US-PATENT-AEFL-SN-629456 US-PATENT-CLASS-242-57 US-PATENT-CLASS-242-187 US-PATENT-CLASS-242-193 US-PATENT-CLASS-242-204 US-PATENT-CLASS-242-210 US-PATENT-3,995,789	c32 N77-15233 NASA-CASE-MSC-16100-1 US-PATENT-APPL-SN-750796
c44 N77-14580	NASA-CASE-LEW-11496-1 US-PATENT-APPL-SN-645508 US-PATENT-CLASS-136-89 US-PATENT-CLASS-204-192 US-PATENT-3,996,067	c32 N77-15236 NASA-CASE-LAB-12016-1 US-PATENT-APPL-SN-754066
c44 N77-14581	NASA-CASE-LEW-12220-1 US-PATENT-AEFL-SN-606891 US-PATENT-CLASS-320-2 US-PATENT-CLASS-429-23 US-PATENT-CLASS-429-34 US-PATENT-3,996,064	c34 N77-15343 NASA-CASE-LEW-12508-1 US-PATENT-APPL-SN-746580
c52 N77-14735	NASA-CASE-MPS-23225-1 US-PATENT-AEFL-SN-612965 US-PATENT-CLASS-3-1.2 US-PATENT-CLASS-3-14 US-PATENT-3,995,324	c37 N77-15397 NASA-CASE-MSC-16043-1 US-PATENT-APPL-SN-750792
c52 N77-14736	NASA-CASE-ARC-11007-1 US-PATENT-AEFL-SN-652948 US-PATENT-CLASS-128-2H US-PATENT-CLASS-128-379 US-PATENT-CLASS-128-400 US-PATENT-CLASS-128-402 US-PATENT-3,995,621	c37 N77-15400 NASA-CASE-GSC-11883-2 US-PATENT-AEFL-SN-747675
c52 N77-14737	NASA-CASE-MSC-14276-1 US-PATENT-AEFL-SN-557430 US-PATENT-CLASS-250-363R US-PATENT-CLASS-250-444 US-PATENT-CLASS-250-498 US-PATENT-3,996,471	c44 N77-15490 NASA-CASE-LEW-12185-1 US-PATENT-APPL-SN-746269
c52 N77-14738	NASA-CASE-KSC-10849-1 US-PATENT-AEFL-SN-613734 US-PATENT-CLASS-3-1.1 US-PATENT-CLASS-128-418 US-PATENT-CLASS-339-252R US-PATENT-3,995,644	c44 N77-15493 NASA-CASE-KSC-11010-1 US-PATENT-APPL-SN-753977
c54 N77-14742	NASA-CASE-ABC-11101-1 US-PATENT-AEFL-SN-753976	c52 N77-15619 NASA-CASE-ARC-10994-2 US-PATENT-AEFL-SN-759965
c54 N77-14743	NASA-CASE-ABC-11059-1 US-PATENT-AEFL-SN-753978	c52 N77-15621 NASA-CASE-ARC-11035-1 US-PATENT-APPL-SN-758721
c60 N77-14751	NASA-CASE-GSC-11839-1 US-PATENT-AEFL-SN-468614 US-PATENT-CLASS-235-152 US-PATENT-CLASS-250-227 US-PATENT-CLASS-340-172.5	c54 N77-15641 NASA-CASE-ARC-11058-1 US-PATENT-APPL-SN-753965
		c74 N77-15826 NASA-CASE-KSC-11047-1 US-PATENT-APPL-SN-715485
		c05 N77-17029 NASA-CASE-ARC-10807-1 US-PATENT-AEFL-SN-513612 US-PATENT-CLASS-416-104 US-PATENT-CLASS-416-138 US-PATENT-CLASS-416-141 US-PATENT-3,999,886
		c07 N77-17059 NASA-CASE-LEW-12760-1 US-PATENT-APPL-SN-569925 US-PATENT-CLASS-60-226A US-PATENT-CLASS-60-228 US-PATENT-4,005,574
		c20 N77-17143 NASA-CASE-XLA-1349 US-PATENT-APPL-SN-54552 US-PATENT-APPL-SN-256493 US-PATENT-CLASS-86-1R US-PATENT-CLASS-86-20R US-PATENT-CLASS-102-49.3 US-PATENT-CLASS-264-3R US-PATENT-J, 193, 883 US-PATENT-4,000,682
		c23 N77-17161 NASA-CASE-MSC-14428-1 US-PATENT-APPL-SN-450504 US-PATENT-CLASS-23-230B US-PATENT-CLASS-23-230H US-PATENT-CLASS-23-230R US-PATENT-CLASS-23-231 US-PATENT-CLASS-23-232C US-PATENT-CLASS-23-232R US-PATENT-CLASS-23-254R US-PATENT-CLASS-55-67 US-PATENT-CLASS-55-74 US-PATENT-CLASS-55-197 US-PATENT-CLASS-73-23.1 US-PATENT-CLASS-73-61.1C US-PATENT-4,003,257
		c25 N77-17178 NASA-CASE-ABC-10992-1 US-PATENT-APPL-SN-760810
		c27 N77-17245 NASA-CASE-ARC-10892-2 US-PATENT-APPL-SN-767912
		c28 N77-17258 NASA-CASE-NPO-13858-1 NASA-CASE-NPO-13859-1 US-PATENT-APPL-SN-740153
		c32 N77-17325 NASA-CASE-NPO-13862-1 US-PATENT-APPL-SN-744577
		c33 N77-17351 NASA-CASE-MPS-23181-1 US-PATENT-APPL-SN-566495 US-PATENT-CLASS-331-114 US-PATENT-CLASS-331-177V US-PATENT-CLASS-332-18 US-PATENT-CLASS-332-30V US-PATENT-4,003,004

ACCESSION NUMBER INDEX

c33 N77-17354	NASA-CASE-LEW-11881-1 US-PATENT-APPL-SN-598968 US-PATENT-CLASS-307-229 US-PATENT-CLASS-307-230 US-PATENT-CLASS-328-161 US-PATENT-4,001,602	c52 N77-18733	US-PATENT-APPL-SN-776146 NASA-CASE-GSC-12045-1 US-PATENT-APPL-SN-760795
c33 N77-17357	NASA-CASE-LEW-12273-1 US-PATENT-APPL-SN-764253	c73 N77-18891	NASA-CASE-NPO-13121-1 US-PATENT-APPL-SN-294727 US-PATENT-CLASS-310-448 US-PATENT-CLASS-313-311 US-PATENT-CLASS-3468 US-PATENT-4,008,407
c33 N77-17358	NASA-CASE-NPO-13909-1 US-PATENT-APPL-SN-744477	c74 N77-18893	NASA-CASE-HSC-14683-1 US-PATENT-APPL-SN-612967 US-PATENT-CLASS-358-44 US-PATENT-4,004,292
c33 N77-17359	NASA-CASE-NPO-13872-1 US-PATENT-APPL-SN-742034	c04 N77-19056	NASA-CASE-LAR-11387-2 US-PATENT-APPL-SN-531647 US-PATENT-APPL-SN-623156 US-PATENT-CLASS-33-356 US-PATENT-CLASS-73-1788 US-PATENT-3,943,763 US-PATENT-4,006,631
c33 N77-17360	NASA-CASE-LEW-12013-1 US-PATENT-APPL-SN-768795	c09 N77-19076	NASA-CASE-ABC-10979-1 US-PATENT-APPL-SN-608483 US-PATENT-CLASS-124-6 US-PATENT-CLASS-244-63 US-PATENT-3,989,206
c35 N77-17426	NASA-CASE-MFS-22671-2 US-PATENT-APPL-SN-419831 US-PATENT-APPL-SN-561956 US-PATENT-CLASS-360-25 US-PATENT-CLASS-360-31 US-PATENT-3,875,500 US-PATENT-4,003,084	c09 N77-19077	NASA-CASE-HSC-19706-1 US-PATENT-APPL-SN-767911
c35 N77-17430	NASA-CASE-LAR-11617-2 US-PATENT-APPL-SN-668771	c24 N77-19170	NASA-CASE-LEW-12550-1 US-PATENT-APPL-SN-596905 US-PATENT-CLASS-416-224 US-PATENT-CLASS-416-230 US-PATENT-4,006,999
c37 N77-17464	NASA-CASE-GSC-11978-1 US-PATENT-APPL-SN-593142 US-PATENT-CLASS-308-10 US-PATENT-4,000,929	c24 N77-19171	NASA-CASE-LEW-12619-1 US-PATENT-APPL-SN-462424 US-PATENT-CLASS-29-527.2 US-PATENT-CLASS-204-9 US-PATENT-CLASS-204-16 US-PATENT-CLASS-204-40 US-PATENT-3,989,602
c37 N77-17466	NASA-CASE-NPO-13823-1 US-PATENT-APPL-SN-658487	c24 N77-19173	NASA-CASE-ABC-11040-1 US-PATENT-APPL-SN-778195
c38 N77-17495	NASA-CASE-GSC-11902-1 US-PATENT-APPL-SN-565289 US-PATENT-CLASS-235-92CA US-PATENT-CLASS-235-92CT US-PATENT-CLASS-235-92DN US-PATENT-CLASS-235-92R US-PATENT-4,001,552	c32 N77-19290	NASA-CASE-HSC-12743-1 US-PATENT-APPL-SN-765167
c44 N77-17564	NASA-CASE-LEW-12552-1 US-PATENT-APPL-SN-776869	c33 N77-19319	NASA-CASE-GSC-12145-1 US-PATENT-APPL-SN-769149
c44 N77-17565	NASA-CASE-LEW-12236-1 US-PATENT-APPL-SN-760771	c33 N77-19320	NASA-CASE-HSC-14939-1 US-PATENT-APPL-SN-765165
c45 N77-17609	NASA-CASE-LAR-12046-1 US-PATENT-APPL-SN-755310	c34 N77-19353	NASA-CASE-ABC-10912-1 US-PATENT-APPL-SN-623187 US-PATENT-CLASS-62-100 US-PATENT-CLASS-62-121 US-PATENT-CLASS-62-269 US-PATENT-CLASS-62-315 US-PATENT-4,007,601
c52 N77-17701	NASA-CASE-ABC-10985-1 US-PATENT-APPL-SN-769148	c35 N77-19385	NASA-CASE-HSC-14653-1 US-PATENT-APPL-SN-521816 US-PATENT-CLASS-73-432E US-PATENT-CLASS-177-1 US-PATENT-CLASS-177-208 US-PATENT-3,988,933
c85 N77-17949	NASA-CASE-NPO-13847-2 NASA-CASE-NPO-13848-2 US-PATENT-APPL-SN-750798 NASA-CASE-LAR-11900-1 US-PATENT-APPL-SN-775239	c35 N77-19388	NASA-CASE-ABC-10639-1 US-PATENT-APPL-SN-643043
c05 N77-18134	NASA-CASE-ARC-10761-1 US-PATENT-APPL-SN-612899 US-PATENT-CLASS-137-15.1 US-PATENT-CLASS-244-53B US-PATENT-4,007,891	c35 N77-19390	NASA-CASE-NPO-13804-1 US-PATENT-APPL-SN-766999
c07 N77-18154	NASA-CASE-ARC-10761-1 US-PATENT-APPL-SN-612899 US-PATENT-CLASS-137-15.1 US-PATENT-CLASS-244-53B US-PATENT-4,007,891	c36 N77-19416	NASA-CASE-IMP-04167-3 US-PATENT-APPL-SN-170544 US-PATENT-APPL-SN-479357 US-PATENT-CLASS-331-94.5D US-PATENT-CLASS-331-94.5E US-PATENT-CLASS-331-94.5FE US-PATENT-4,007,430
c07 N77-18160	NASA-CASE-LEW-12232-1 US-PATENT-APPL-SN-776029	c36 N77-19418	NASA-CASE-NPO-13945-1 US-PATENT-APPL-SN-704180
c14 N77-18179	NASA-CASE-MFS-23052-2 US-PATENT-APPL-SN-772165	c37 N77-19457	NASA-CASE-MFS-15218-1 US-PATENT-APPL-SN-387094 US-PATENT-CLASS-197-188 US-PATENT-CLASS-197-190 US-PATENT-3,989,136
c25 N77-18238	NASA-CASE-LEW-12513-1 US-PATENT-APPL-SN-772167	c37 N77-19458	NASA-CASE-GSC-11883-1 NASA-CASE-GSC-11974-1 NASA-CASE-GSC-11975-1 US-PATENT-APPL-SN-596787 US-PATENT-CLASS-60-527 US-PATENT-CLASS-75-122.7 US-PATENT-CLASS-75-170 US-PATENT-CLASS-310-4A US-PATENT-CLASS-337-334 US-PATENT-CLASS-340-224 US-PATENT-4,010,455
c27 N77-18265	NASA-CASE-ABC-10980-1 US-PATENT-APPL-SN-694407		
c32 N77-18307	NASA-CASE-MFS-23303-1 US-PATENT-APPL-SN-676957 US-PATENT-CLASS-333-70R US-PATENT-CLASS-333-75 US-PATENT-CLASS-333-76 US-PATENT-CLASS-333-82B US-PATENT-4,007,434		
c34 N77-18382	NASA-CASE-LAR-10805-2 US-PATENT-APPL-SN-428992 US-PATENT-APPL-SN-578240 US-PATENT-CLASS-244-117A US-PATENT-CLASS-427-160 US-PATENT-CLASS-427-322 US-PATENT-CLASS-428-35 US-PATENT-CLASS-428-421 US-PATENT-CLASS-428-461 US-PATENT-CLASS-428-474 US-PATENT-4,008,348		
c35 N77-18417	NASA-CASE-ABC-10898-1 US-PATENT-APPL-SN-625732 US-PATENT-CLASS-73-12 US-PATENT-CLASS-73-71.6 US-PATENT-CLASS-73-432SD US-PATENT-4,007,623		
c36 N77-18429	NASA-CASE-LEW-12217-1 US-PATENT-APPL-SN-763753		
c44 N77-18560	NASA-CASE-LEW-12358-1		

ACCESSION NUMBER INDEX

c37 N77-19459 NASA-CASE-HSC-19514-1
US-PATENT-AFEL-SN-772168
c44 N77-19571 NASA-CASE-LEW-11549-1
US-PATENT-APPL-SN-510677
US-PATENT-CLASS-136-89
US-PATENT-3,989,541
c44 N77-19579 NASA-CASE-NPO-13813-1
NASA-CASE-NPO-13914-1
US-PATENT-APPL-SN-765139
US-PATENT-NPO-13732-1
c44 N77-19581 NASA-CASE-NPO-13732-1
US-PATENT-AFEL-SN-765138
c52 N77-19750 NASA-CASE-NPO-13913-1
US-PATENT-APPL-SN-687251
c60 N77-19760 NASA-CASE-ARC-10899-1
US-PATENT-APPL-SN-576774
US-PATENT-CLASS-178-69.5B
US-PATENT-CLASS-179-15BS
US-PATENT-CLASS-340-172.5
US-PATENT-3,990,049
c06 N77-20098 NASA-CASE-LAR-11941-1
US-PATENT-APPL-SN-780568
c20 N77-20162 NASA-CASE-LEW-12048-1
US-PATENT-APPL-SN-665033
US-PATENT-CLASS-60-202
US-PATENT-CLASS-313-230
US-PATENT-CLASS-313-231.3
US-PATENT-CLASS-313-360
US-PATENT-CLASS-315-111.3
US-PATENT-CLASS-315-111.6
US-PATENT-4,011,719
c26 N77-20201 NASA-CASE-LEW-12245-1
US-PATENT-APPL-SN-584094
US-PATENT-CLASS-75-170
US-PATENT-CLASS-148-2
US-PATENT-CLASS-148-12.7N
US-PATENT-CLASS-148-20.3
US-PATENT-CLASS-148-32.5
US-PATENT-CLASS-148-162
US-PATENT-4,012,637
c27 N77-20256 NASA-CASE-ARC-10915-2
US-PATENT-APPL-SN-779883
c32 N77-20289 NASA-CASE-NPO-13753-1
US-PATENT-APPL-SN-658449
US-PATENT-CLASS-325-4
US-PATENT-CLASS-343-6.8B
US-PATENT-CLASS-343-6.5B
US-PATENT-CLASS-343-100ST
US-PATENT-4,012,696
c32 N77-20299 NASA-CASE-GSC-12142-1
US-PATENT-APPL-SN-774553
c33 N77-20341 NASA-CASE-HPS-23659-1
US-PATENT-APPL-SN-782462
c33 N77-20343 NASA-CASE-KSC-11035-1
US-PATENT-APPL-SN-780874
c33 N77-20344 NASA-CASE-GSC-12138-1
US-PATENT-APPL-SN-779871
c35 N77-20399 NASA-CASE-ARC-10716-1
US-PATENT-APPL-SN-403695
US-PATENT-CLASS-235-150.2
US-PATENT-CLASS-235-150.25
US-PATENT-CLASS-244-3.21
US-PATENT-CLASS-244-165
US-PATENT-CLASS-244-171
US-PATENT-4,012,018
c35 N77-20400 NASA-CASE-ARC-10911-1
US-PATENT-APPL-SN-610802
US-PATENT-CLASS-73-204
US-PATENT-CLASS-338-28
US-PATENT-4,011,756
c35 N77-20401 NASA-CASE-HPS-23267-1
US-PATENT-APPL-SN-653422
US-PATENT-CLASS-126-270
US-PATENT-CLASS-126-271
US-PATENT-CLASS-250-203B
US-PATENT-4,011,854
c35 N77-20408 NASA-CASE-LEW-12718-1
US-PATENT-APPL-SN-779428
c35 N77-20410 NASA-CASE-GSC-12147-1
US-PATENT-APPL-SN-780873
c37 N77-20441 NASA-CASE-HPS-23506-2
US-PATENT-APPL-SN-768794
c44 N77-20565 NASA-CASE-NPO-13579-2
US-PATENT-APPL-SN-762362
c44 N77-20566 NASA-CASE-NPO-13579-3
US-PATENT-APPL-SN-762363
c74 N77-20882 NASA-CASE-LAR-11782-1
US-PATENT-APPL-SN-608482
US-PATENT-CLASS-350-145
US-PATENT-CLASS-350-174

US-PATENT-4,012,123
c26 N77-21217 NASA-CASE-LEW-12543-1
US-PATENT-APPL-SN-788044
c32 N77-21267 NASA-CASE-LAR-11390-1
US-PATENT-APPL-SN-664176
US-PATENT-CLASS-340-5B
US-PATENT-CLASS-343-5CM
US-PATENT-CLASS-343-5MM
US-PATENT-CLASS-343-18E
US-PATENT-4,019,179
c33 N77-21314 NASA-CASE-NPO-10189-1
NASA-CASE-NPO-10781-1
US-PATENT-APPL-SN-744522
US-PATENT-CLASS-307-232
US-PATENT-CLASS-307-238
US-PATENT-CLASS-307-28C
US-PATENT-CLASS-329-119
US-PATENT-CLASS-329-205
US-PATENT-CLASS-332-16
US-PATENT-CLASS-332-30
US-PATENT-CLASS-332-52
US-PATENT-3,582,828
c33 N77-21315 NASA-CASE-NPO-11510-1
US-PATENT-APPL-SN-173178
US-PATENT-APPL-SN-385059
US-PATENT-CLASS-313-32
US-PATENT-CLASS-313-161
US-PATENT-CLASS-313-184
US-PATENT-CLASS-313-224
US-PATENT-CLASS-315-344
US-PATENT-3,881,132
c33 N77-21316 NASA-CASE-NPO-10790-1
US-PATENT-APPL-SN-841278
US-PATENT-CLASS-313-175
US-PATENT-CLASS-313-180
US-PATENT-CLASS-313-184
US-PATENT-CLASS-315-108
US-PATENT-CLASS-315-110
US-PATENT-3,621,330
c33 N77-21319 NASA-CASE-KSC-11031-1
US-PATENT-APPL-SN-782482
c33 N77-21320 NASA-CASE-KSC-11018-1
US-PATENT-APPL-SN-782693
c33 N77-21321 NASA-CASE-KSC-11008-1
US-PATENT-APPL-SN-780729
c33 N77-21322 NASA-CASE-GSC-12146-1
US-PATENT-APPL-SN-782480
c35 N77-21392 NASA-CASE-NPO-10711-1
US-PATENT-APPL-SN-844315
US-PATENT-CLASS-179-100.2C
US-PATENT-3,697,705
c35 N77-21393 NASA-CASE-NPO-10619-1
US-PATENT-APPL-SN-757017
US-PATENT-CLASS-338-25
US-PATENT-3,555,483
c36 N77-21424 NASA-CASE-LAR-12183-1
US-PATENT-APPL-788704
c44 N77-21666 NASA-CASE-KSC-11034-1
US-PATENT-APPL-SN-782481
c54 N77-21844 NASA-CASE-HPS-23074-1
US-PATENT-APPL-SN-623188
US-PATENT-CLASS-188-291
US-PATENT-CLASS-254-158
US-PATENT-4,018,423
c54 N77-21847 NASA-CASE-HSC-16182-1
US-PATENT-APPL-SN-780930
c74 N77-21941 NASA-CASE-NPO-11429-1
US-PATENT-APPL-SN-95189
US-PATENT-CLASS-240-41.35B
US-PATENT-CLASS-240-41B
US-PATENT-CLASS-240-46.13
US-PATENT-CLASS-356-236
US-PATENT-3,711,701
c02 N77-22045 NASA-CASE-LAR-12034-1
US-PATENT-APPL-SN-733814
c08 N77-22147 NASA-CASE-LAR-11970-1
US-PATENT-APPL-SN-727503
c24 N77-22179 NASA-CASE-LAR-12019-1
US-PATENT-APPL-SN-792067
c27 N77-22257 NASA-CASE-NPO-13867-1
US-PATENT-APPL-SN-692284
c32 N77-22314 NASA-CASE-GSC-12148-1
US-PATENT-APPL-SN-786322
c33 N77-22386 NASA-CASE-NPO-10870-1
NASA-CASE-NPO-11191-1
NASA-CASE-NPO-11403-1
US-PATENT-APPL-SN-1-881-1
US-PATENT-CLASS-313-60
US-PATENT-CLASS-313-146

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-313-182		US-PATENT-CLASS-403-273
	US-PATENT-3,736,453		US-PATENT-4,017,959
c34 N77-22423	NASA-CASE-HSC-12737-1	c37 N77-23483	NASA-CASE-HFS-23088-1
	US-PATENT-AEFL-SN-788045		US-PATENT-AEFL-SN-602617
c35 N77-22449	NASA-CASE-LAR-11825-1		US-PATENT-CLASS-213-81
	US-PATENT-AEFL-SN-632112		US-PATENT-CLASS-214-1CM
	US-PATENT-CLASS-73-88R		US-PATENT-CLASS-244-161
	US-PATENT-4,018,085		US-PATENT-4,018,409
c35 N77-22450	NASA-CASE-HFS-23281-1	c52 N77-23743	NASA-CASE-ARC-11120-1
	US-PATENT-AEFL-SN-657995		US-PATENT-AEFL-SN-796256
	US-PATENT-CLASS-73-15.6	c24 N77-24200	NASA-CASE-ARC-10915-J
	US-PATENT-CLASS-73-95		US-PATENT-AEFL-SN-797217
	US-PATENT-4,018,080	c26 N77-24254	NASA-CASE-LEW-12542-1
c35 N77-22452	NASA-CASE-LAR-11201-1		US-PATENT-AEFL-SN-803822
	US-PATENT-AEFL-SN-788705	c32 N77-24328	NASA-CASE-ARC-10984-1
	NASA-CASE-NPO-10857-1		US-PATENT-AEFL-SN-690815
	US-PATENT-AEFL-SN-886907		US-PATENT-CLASS-358-133
	US-PATENT-CLASS-408-186		US-PATENT-CLASS-358-138
	US-PATENT-CLASS-408-193		US-PATENT-4,025,950
	US-PATENT-CLASS-408-225	c32 N77-24331	NASA-CASE-HSC-14840-1
	US-PATENT-3,635,573		US-PATENT-AEFL-SN-692414
c37 N77-22479	NASA-CASE-NPO-10316-1		US-PATENT-CLASS-178-88
	US-PATENT-AEFL-SN-703107		US-PATENT-CLASS-325-346
	US-PATENT-CLASS-60-53		US-PATENT-CLASS-329-104
	US-PATENT-3,478,514		US-PATENT-CLASS-329-122
c37 N77-22480	NASA-CASE-NPO-13058-1		US-PATENT-4,027,265
	NASA-CASE-NPO-13096-1	c32 N77-24338	NASA-CASE-NPO-14024-1
	US-PATENT-AEFL-SN-403154		US-PATENT-AEFL-SN-780728
	US-PATENT-CLASS-214-16.1CB	c32 N77-24339	NASA-CASE-LAR-11745-1
	US-PATENT-3,896,955		US-PATENT-AEFL-SN-799025
c37 N77-22482	NASA-CASE-HSC-19536-1	c32 N77-24340	NASA-CASE-NPO-13641-1
	US-PATENT-AEFL-SN-658450		US-PATENT-AEFL-SN-777983
	US-PATENT-CLASS-74-96	c32 N77-24341	NASA-CASE-NPO-13982-1
	US-PATENT-4,018,092		US-PATENT-AEFL-SN-782464
c37 N77-22484	NASA-CASE-BQR-10888-1	c33 N77-24375	NASA-CASE-HSC-12709-1
	US-PATENT-AEFL-SN-760057		US-PATENT-AEFL-SN-630583
c44 N77-22606	NASA-CASE-LEW-12364-1		US-PATENT-CLASS-307-225R
	US-PATENT-AEFL-SN-707124		US-PATENT-CLASS-328-46
	US-PATENT-CLASS-253-317		US-PATENT-CLASS-328-38
	US-PATENT-CLASS-429-105		US-PATENT-CLASS-428-39
	US-PATENT-CLASS-429-107		US-PATENT-CLASS-328-63
	US-PATENT-CLASS-429-190		US-PATENT-4,025,866
	US-PATENT-4,018,971	c33 N77-24385	NASA-CASE-LEW-12791-1
c44 N77-22607	NASA-CASE-LAR-11361-1		US-PATENT-AEFL-SN-801432
	US-PATENT-AEFL-SN-669928	c34 N77-24423	NASA-CASE-LAR-12045-1
	US-PATENT-CLASS-23-277R		US-PATENT-AEFL-SN-682416
	US-PATENT-CLASS-23-281		US-PATENT-CLASS-259/4R
	US-PATENT-CLASS-55-158		US-PATENT-CLASS-261/DIG.75
	US-PATENT-CLASS-423-648R		US-PATENT-CLASS-261/123
	US-PATENT-4,019,868		US-PATENT-4,026,527
c44 N77-22615	NASA-CASE-LEW-12541-1	c35 N77-24454	NASA-CASE-ARC-10900-1
	US-PATENT-AEFL-SN-790637		US-PATENT-AEFL-SN-630579
c51 N77-22794	NASA-CASE-GSC-12039-1		US-PATENT-CLASS-338-28
	US-PATENT-AEFL-SN-572991		US-PATENT-CLASS-338-229
	US-PATENT-CLASS-195-103.5R		US-PATENT-4,025,891
	US-PATENT-CLASS-195-103.5R	c35 N77-24455	NASA-CASE-GSC-12077-1
	US-PATENT-4,014,745		US-PATENT-AEFL-SN-635519
c74 N77-22950	NASA-CASE-ARC-10976-1		US-PATENT-CLASS-65-59A
	US-PATENT-AEFL-SN-665032		US-PATENT-CLASS-65-108
	US-PATENT-CLASS-356-171		US-PATENT-CLASS-6554
	US-PATENT-4,018,533		US-PATENT-CLASS-6564
c74 N77-22951	NASA-CASE-NPO-13722-1		US-PATENT-4,025,327
	US-PATENT-AEFL-SN-616472	c35 N77-24456	NASA-CASE-NPO-13808-1
	US-PATENT-CLASS-250-203R		US-PATENT-AEFL-SN-675328
	US-PATENT-CLASS-250-211R	c36 N77-24468	NASA-CASE-NPO-13993-1
	US-PATENT-CLASS-356-141		US-PATENT-AEFL-SN-782463
	US-PATENT-CLASS-356-152	c36 N77-24469	NASA-CASE-NPO-13448-2
	US-PATENT-CLASS-356-172		US-PATENT-AEFL-SN-789760
	US-PATENT-4,018,532	c37 N77-24496	NASA-CASE-LEW-12569-1
c07 N77-23106	NASA-CASE-LEW-12830-1		US-PATENT-AEFL-SN-792069
	US-PATENT-AEFL-SN-596641	c37 N77-24497	NASA-CASE-HFS-23620-1
	US-PATENT-AEFL-SN-655149		US-PATENT-AEFL-SN-799023
	US-PATENT-CLASS-60-39.03	c37 N77-24498	NASA-CASE-LEW-12131-1
	US-PATENT-CLASS-60-39.28R		US-PATENT-AEFL-SN-801290
	US-PATENT-CLASS-60-39.66	c44 N77-24585	NASA-CASE-LEW-12775-1
	US-PATENT-CLASS-123-41.33		US-PATENT-AEFL-SN-799026
	US-PATENT-CLASS-123-122R	c44 N77-24590	NASA-CASE-NPO-13921-1
	US-PATENT-CLASS-137-101		US-PATENT-AEFL-SN-785257
	US-PATENT-CLASS-415-180	c44 N77-24593	NASA-CASE-LEW-12819-1
	US-PATENT-4,020,632		US-PATENT-AEFL-SN-803823
c27 N77-23267	NASA-CASE-RSC-11020-1	c51 N77-24755	NASA-CASE-HSC-16098-1
	US-PATENT-AEFL-SN-796257		US-PATENT-AEFL-SN-792068
c35 N77-23441	NASA-CASE-LAR-12106-1	c54 N77-24771	NASA-CASE-ARC-10975-1
	US-PATENT-AEFL-SN-740156		US-PATENT-AEFL-SN-799832
c37 N77-23482	NASA-CASE-LAR-11563-1	c60 N77-24781	NASA-CASE-NPO-13676-1
	US-PATENT-AEFL-SN-672815		US-PATENT-AEFL-SN-779415
	US-PATENT-CLASS-29-DIG.35	c28 N77-25346	NASA-CASE-NPO-14103-1
	US-PATENT-CLASS-29-447		US-PATENT-AEFL-SN-797210
	US-PATENT-CLASS-53-9	c36 N77-25499	NASA-CASE-GSC-11571-1

ACCESSION NUMBER INDEX

	US-PATENT-APPL-SN-646704	c24 N77-27187	NASA-CASE-HPS-22926-1
	US-PATENT-CLASS-331-94.5S		US-PATENT-APPL-SN-557565
	US-PATENT-4,025,875		US-PATENT-CLASS-75-658
c36 N77-25501	NASA-CASE-ARC-10970-1		US-PATENT-CLASS-75-135
	US-PATENT-APPL-SN-691046		US-PATENT-CLASS-75-139
	US-PATENT-CLASS-250-574		US-PATENT-CLASS-164-60
	US-PATENT-CLASS-350-100		US-PATENT-4,029,500
	US-PATENT-CLASS-350-102	c24 N77-27188	NASA-CASE-LEW-12118-1
	US-PATENT-CLASS-356-28		US-PATENT-APPL-SN-616332
	US-PATENT-4,026,655		US-PATENT-CLASS-428-301
c36 N77-25502	NASA-CASE-NPO-13147-1		US-PATENT-CLASS-428-328
	US-PATENT-APPL-SN-317310		US-PATENT-CLASS-428-368
	US-PATENT-CLASS-330-4.3		US-PATENT-CLASS-428-418
	US-PATENT-CLASS-331-94.5D		US-PATENT-CLASS-428-457
	US-PATENT-CLASS-331-94.5P		US-PATENT-CLASS-428-902
	US-PATENT-4,027,273		US-PATENT-CLASS-428-911
c37 N77-25535	NASA-CASE-NPO-13798-1		US-PATENT-4,029,838
	US-PATENT-APPL-SN-788856	c32 N77-27272	NASA-CASE-GSC-12137-1
	NASA-CASE-MSC-19546-1		US-PATENT-APPL-SN-808510
	US-PATENT-APPL-SN-793670	c33 N77-27308	NASA-CASE-HPS-23541-1
	NASA-CASE-LAR-10773-3		US-PATENT-APPL-SN-814005
	US-PATENT-APPL-SN-125235	c34 N77-27345	NASA-CASE-ARC-10974-1
	US-PATENT-APPL-SN-314656		US-PATENT-APPL-SN-667010
	US-PATENT-APPL-SN-623238		US-PATENT-CLASS-73-189
	US-PATENT-CLASS-195-1.8		US-PATENT-CLASS-73-228
	US-PATENT-4,018,649		US-PATENT-4,028,939
c52 N77-25772	NASA-CASE-KSC-11030-1	c35 N77-27366	NASA-CASE-GSC-12059-1
	US-PATENT-APPL-SN-709849		US-PATENT-APPL-SN-680957
	US-PATENT-CLASS-3-1		US-PATENT-CLASS-331-94.5D
	US-PATENT-CLASS-128-1R		US-PATENT-CLASS-331-94.5T
	US-PATENT-CLASS-339,12R		US-PATENT-CLASS-350-253
	US-PATENT-4,025,964		US-PATENT-4,030,047
c54 N77-25784	NASA-CASE-ARC-11100-1	c35 N77-27367	NASA-CASE-NPO-11103-1
	US-PATENT-APPL-SN-780569		US-PATENT-APPL-SN-3654
c24 N77-26242	NASA-CASE-LAR-11898-2		US-PATENT-CLASS-73-84
	US-PATENT-APPL-SN-799024		US-PATENT-3,623,359
c27 N77-26308	NASA-CASE-ARC-11057-1	c35 N77-27368	NASA-CASE-MSC-12427-1
	US-PATENT-APPL-SN-807762		US-PATENT-APPL-SN-19572
c33 N77-26385	NASA-CASE-LEW-11978-1		US-PATENT-CLASS-73-362AR
	US-PATENT-APPL-SN-708658		US-PATENT-3,613,454
	US-PATENT-CLASS-29-597	c37 N77-27400	NASA-CASE-GSC-11063-1
	US-PATENT-CLASS-29-622		US-PATENT-APPL-SN-41431
	US-PATENT-CLASS-29-628		US-PATENT-CLASS-318-267
	US-PATENT-CLASS-29-630E		US-PATENT-CLASS-318-468
	US-PATENT-CLASS-204-32A		US-PATENT-CLASS-318-470
	US-PATENT-4,023,266		US-PATENT-CLASS-318-675
c33 N77-26386	NASA-CASE-GSC-11824-1		US-PATENT-3,628,113
	US-PATENT-APPL-SN-583486	c37 N77-27404	NASA-CASE-LEW-11873-1
	US-PATENT-CLASS-318-138		US-PATENT-APPL-SN-814006
	US-PATENT-CLASS-318-227	c39 N77-27432	NASA-CASE-LAR-12095-1
	US-PATENT-CLASS-318-254		US-PATENT-APPL-SN-811401
	US-PATENT-4,027,212	c51 N77-27677	NASA-CASE-LAR-11649-1
c33 N77-26387	NASA-CASE-LAR-11389-1		US-PATENT-APPL-SN-626942
	US-PATENT-APPL-SN-229143		US-PATENT-CLASS-8-3
	US-PATENT-APPL-SN-340862		US-PATENT-CLASS-8-94.11
	US-PATENT-CLASS-310-111		US-PATENT-CLASS-23-253A
	US-PATENT-CLASS-310-168		US-PATENT-CLASS-23-259
	US-PATENT-CLASS-322-96		US-PATENT-CLASS-23-292
	US-PATENT-3,849,720		US-PATENT-CLASS-118-6
c36 N77-26477	NASA-CASE-NPO-13550-1		US-PATENT-CLASS-118-7
	US-PATENT-APPL-SN-483301		US-PATENT-CLASS-118-9
	US-PATENT-CLASS-250-281		US-PATENT-CLASS-118-313
	US-PATENT-CLASS-250-282		US-PATENT-CLASS-424-3
	US-PATENT-CLASS-250-283		US-PATENT-CLASS-427-4
	US-PATENT-CLASS-250-423P		US-PATENT-4,029,470
	US-PATENT-4,031,389	c52 N77-27693	NASA-CASE-GSC-12173-1
c52 N77-26796	NASA-CASE-GSC-12081-2		US-PATENT-APPL-SN-806440
	US-PATENT-APPL-SN-796258	c52 N77-27694	NASA-CASE-GSC-12082-2
c52 N77-26797	NASA-CASE-GSC-12046-1		US-PATENT-APPL-SN-798976
	US-PATENT-APPL-SN-680015	c05 N77-28111	NASA-CASE-ARC-11045-1
c71 N77-26519	NASA-CASE-NPO-13673-1		US-PATENT-APPL-SN-818916
	US-PATENT-APPL-SN-613004	c07 N77-28118	NASA-CASE-LAR-11310-1
	US-PATENT-CLASS-330-5.5		US-PATENT-APPL-SN-394898
	US-PATENT-CLASS-331-107A		US-PATENT-CLASS-60-226R
	US-PATENT-CLASS-333-72		US-PATENT-CLASS-60-263
	US-PATENT-4,025,876		US-PATENT-CLASS-415-145
c74 N77-26942	NASA-CASE-GSC-12058-1		US-PATENT-4,033,119
	US-PATENT-APPL-SN-680938	c20 N77-28219	NASA-CASE-GSC-12194-1
	US-PATENT-CLASS-250-199		US-PATENT-APPL-SN-819029
	US-PATENT-4,025,783	c24 N77-28225	NASA-CASE-MSC-12631-1
c07 N77-27116	NASA-CASE-LEW-12608-1		US-PATENT-APPL-SN-568541
	US-PATENT-APPL-SN-680067		US-PATENT-CLASS-156-229
	US-PATENT-CLASS-416-220R		US-PATENT-CLASS-244-123
	US-PATENT-CLASS-416-221		US-PATENT-CLASS-428-141
	US-PATENT-4,033,705		US-PATENT-CLASS-428-161
c09 N77-27131	NASA-CASE-LAR-11883-1		US-PATENT-CLASS-428-425
	US-PATENT-APPL-SN-662175		US-PATENT-CLASS-428-457
	US-PATENT-CLASS-73-15R		US-PATENT-CLASS-428-458
	US-PATENT-4,027,524		US-PATENT-4,032,089

ACCESSION NUMBER INDEX

c26 N77-28265	NASA-CASE-LEW-11573-1 US-PATENT-APPL-SN-625733 US-PATENT-CLASS-228-190 US-PATENT-CLASS-228-194 US-PATENT-CLASS-228-232 US-PATENT-4,033,504	c35 N77-29471	NASA-CASE-GSC-12263-1 US-PATENT-APPL-SN-817415
c32 N77-28346	NASA-CASE-GSC-12053-1 US-PATENT-APPL-SN-667930 US-PATENT-CLASS-250-199 US-PATENT-CLASS-250-238 US-PATENT-4,033,882	c27 N77-30236	NASA-CASE-NPO-13620-1 US-PATENT-APPL-SN-666992 US-PATENT-CLASS-210-24 US-PATENT-CLASS-536-56 US-PATENT-CLASS-536-58 US-PATENT-CLASS-536-84 US-PATENT-CLASS-536-105 US-PATENT-CLASS-536-536-85 US-PATENT-4,041,233
c32 N77-28357	NASA-CASE-NPO-14009-1 US-PATENT-APPL-SN-818917	c27 N77-30237	NASA-CASE-MFS-23345-1 US-PATENT-APPL-SN-696989 US-PATENT-CLASS-106-292 US-PATENT-CLASS-106-296 US-PATENT-CLASS-106-299 US-PATENT-4,039,347
c32 N77-28358	NASA-CASE-NPO-13955-1 NASA-CASE-NPO-13956-1 NASA-CASE-NPO-13957-1 US-PATENT-APPL-SN-814813	c32 N77-30308	NASA-CASE-GSC-12017-1 US-PATENT-APPL-SN-645510 US-PATENT-CLASS-325-30 US-PATENT-CLASS-325-42 US-PATENT-CLASS-325-65 US-PATENT-CLASS-325-473 US-PATENT-4,041,391
c33 N77-28385	NASA-CASE-LEW-12444-1 US-PATENT-APPL-SN-583485 US-PATENT-CLASS-123-148CB US-PATENT-CLASS-123-148E US-PATENT-CLASS-315-176 US-PATENT-4,033,316	c32 N77-30309	NASA-CASE-GSC-11898-1 US-PATENT-APPL-SN-566494 US-PATENT-CLASS-179-15A US-PATENT-CLASS-179-15P US-PATENT-4,039,754
c33 N77-28394	NASA-CASE-RSC-10899-1 US-PATENT-APPL-SN-814004	c33 N77-30365	NASA-CASE-NPO-13812-1 US-PATENT-APPL-SN-694855 US-PATENT-CLASS-307-64 US-PATENT-CLASS-363-53 US-PATENT-CLASS-363-70 US-PATENT-4,039,925
c33 N77-28395	NASA-CASE-NPO-13569-2 US-PATENT-APPL-SN-804035	c34 N77-30399	NASA-CASE-MFS-19287-1 US-PATENT-APPL-SN-641802 US-PATENT-CLASS-60-259 US-PATENT-CLASS-62-55 US-PATENT-CLASS-137-207 US-PATENT-CLASS-137-209 US-PATENT-4,039,000
c35 N77-28470	NASA-CASE-NPO-13948-1 US-PATENT-APPL-SN-752748	c35 N77-30436	NASA-CASE-MFS-23175-1 US-PATENT-APPL-SN-667928 US-PATENT-CLASS-324-163 US-PATENT-CLASS-324-165 US-PATENT-CLASS-324-174 US-PATENT-CLASS-340-271 US-PATENT-CLASS-340-347P US-PATENT-CLASS-340-347SI US-PATENT-4,039,946
c37 N77-28486	NASA-CASE-LEW-11158-1 US-PATENT-APPL-SN-663008 US-PATENT-CLASS-308-5R US-PATENT-CLASS-308-9 US-PATENT-CLASS-308-73 US-PATENT-4,035,037	c44 N77-30613	NASA-CASE-MFS-23349-1 US-PATENT-APPL-SN-823061
c37 N77-28487	NASA-CASE-MSC-14905-1 US-PATENT-APPL-SN-708795 US-PATENT-CLASS-128-DIG. 12 US-PATENT-CLASS-128-214F US-PATENT-CLASS-222-61 US-PATENT-CLASS-222-95 US-PATENT-4,033,479	c44 N77-30616	NASA-CASE-NPO-14058-1 US-PATENT-APPL-SN-824024
c39 N77-28511	NASA-CASE-MFS-23299-1 US-PATENT-APPL-SN-700673 US-PATENT-CLASS-73-67.7 US-PATENT-CLASS-73-88R US-PATENT-4,033,182	c52 N77-30736	NASA-CASE-LEW-12955-1 US-PATENT-APPL-SN-829318
c43 N77-28563	NASA-CASE-LAB-11973-1 US-PATENT-APPL-SN-821681	c52 N77-30737	NASA-CASE-LEW-12723-1 US-PATENT-APPL-SN-829317
c44 N77-28583	NASA-CASE-NPO-13817-1 US-PATENT-APPL-SN-801452	c54 N77-30749	NASA-CASE-RSC-11004-1 US-PATENT-APPL-SN-710032 US-PATENT-CLASS-3-2 US-PATENT-CLASS-3-21 US-PATENT-4,038,705
c44 N77-28584	NASA-CASE-NPO-13581-2 US-PATENT-APPL-SN-811815	c54 N77-30751	NASA-CASE-ARC-11052-1 US-PATENT-APPL-SN-826202
c44 N77-28585	NASA-CASE-NPO-13652-1 US-PATENT-APPL-SN-809890	c74 N77-30935	NASA-CASE-GSC-12225-1 US-PATENT-APPL-SN-824566
c52 N77-28716	NASA-CASE-LEW-12258-1 US-PATENT-APPL-SN-676433 US-PATENT-CLASS-128-1R US-PATENT-CLASS-128-303R US-PATENT-4,033,309	c76 N77-30984	NASA-CASE-NPO-13969-2 US-PATENT-APPL-SN-820499
c52 N77-28717	NASA-CASE-MSC-14623-1 US-PATENT-APPL-SN-637269 US-PATENT-CLASS-128-DIG. 4 US-PATENT-CLASS-128-2.1E US-PATENT-CLASS-128-410 US-PATENT-4,033,334	c05 N77-31130	NASA-CASE-ARC-11106-1 US-PATENT-APPL-SN-831633
c74 N77-28932	NASA-CASE-GSC-11989-1 US-PATENT-APPL-SN-645500 US-PATENT-CLASS-350-162SF US-PATENT-CLASS-350-202 US-PATENT-CLASS-350-299 US-PATENT-4,035,062	c05 N77-31131	NASA-CASE-MSC-12631-2 US-PATENT-APPL-SN-785279
c74 N77-28933	NASA-CASE-NPO-13707-1 US-PATENT-APPL-SN-617202 US-PATENT-CLASS-350-288 US-PATENT-CLASS-350-310 US-PATENT-CLASS-350-320 US-PATENT-4,035,065	c05 N77-31132	NASA-CASE-LAB-10706-2 US-PATENT-APPL-SN-730780
c74 N77-28937	NASA-CASE-MFS-23675-1 US-PATENT-APPL-SN-820498	c05 N77-31135	NASA-CASE-PHC-10092-1 US-PATENT-APPL-SN-831634
c25 N77-29252	NASA-CASE-ARC-11053-1 US-PATENT-APPL-SN-814378	c08 N77-31176	NASA-CASE-LAB-11868-2 US-PATENT-APPL-SN-779429
c26 N77-29260	NASA-CASE-MFS-23405-1 US-PATENT-APPL-SN-718267 US-PATENT-CLASS-228-124 US-PATENT-CLASS-228-263 US-PATENT-4,033,503	c12 N77-31213	NASA-CASE-MFS-23579-1 US-PATENT-APPL-SN-829316
c33 N77-29403	NASA-CASE-GSC-12190-1 US-PATENT-APPL-SN-817413	c16 N77-31237	NASA-CASE-MSC-12619-2 US-PATENT-APPL-SN-786913
		c25 N77-31260	NASA-CASE-ARC-10814-2 US-PATENT-APPL-SN-831632
		c27 N77-31308	NASA-CASE-NPO-11609-2 US-PATENT-APPL-SN-228229 US-PATENT-APPL-SN-674700

ACCESSION NUMBER INDEX

	US-PATENT-CLASS-210-DIG. 27				US-PATENT-APPL-SN-833636
	US-PATENT-CLASS-210-40		c32	N77-32342	NASA-CASE-NPO-13587-1
	US-PATENT-CLASS-260-2.5A				US-PATENT-APPL-SN-589119
	US-PATENT-CLASS-260-2.5AN				US-PATENT-CLASS-343-5CM
	US-PATENT-CLASS-260-2.5AY				US-PATENT-CLASS-343-5DP
	US-PATENT-CLASS-260-77.5AP				US-PATENT-CLASS-343-10
	US-PATENT-4,039-489				US-PATENT-CLASS-343-100CL
c32	N77-31350	NASA-CASE-GSC-12075-1			US-PATENT-4,045,795
		US-PATENT-APPL-SN-562499	c33	N77-32402	NASA-CASE-NPO-14056-1
		US-PATENT-CLASS-343-17.7			US-PATENT-APPL-SN-833637
		US-PATENT-4,042,926	c34	N77-32413	NASA-CASE-GSC-11998-1
c33	N77-31404	NASA-CASE-ARC-10897-1			US-PATENT-APPL-SN-579989
		US-PATENT-APPL-SN-625781			US-PATENT-CLASS-165-105
		US-PATENT-CLASS-323-93			US-PATENT-4,046,190
		US-PATENT-CLASS-324-60	c34	N77-32434	NASA-CASE-LEW-11981-2
		US-PATENT-CLASS-340-200			US-PATENT-APPL-SN-829315
		US-PATENT-CLASS-340-347SH	c34	N77-32435	NASA-CASE-LEW-12508-2
		US-PATENT-4,040,041			US-PATENT-APPL-SN-829319
c33	N77-31407	NASA-CASE-MFS-22880-2	c35	N77-32454	NASA-CASE-LEW-12050-1
		US-PATENT-APPL-SN-829321			US-PATENT-APPL-SN-629457
c35	N77-31465	NASA-CASE-MFS-23118-1			US-PATENT-CLASS-136-202
		US-PATENT-APPL-SN-691256			US-PATENT-CLASS-136-236H
		US-PATENT-CLASS-356-212			US-PATENT-CLASS-136-240
		US-PATENT-4,040,750			US-PATENT-4,045,247
c37	N77-31497	NASA-CASE-NPO-13671-1	c35	N77-32455	NASA-CASE-NPO-13792-1
		US-PATENT-APPL-SN-564622			US-PATENT-APPL-SN-677351
		US-PATENT-CLASS-123-DIG. 8			US-PATENT-CLASS-324-57H
		US-PATENT-CLASS-123-3			US-PATENT-CLASS-324-59
		US-PATENT-CLASS-123-37			US-PATENT-4,045,728
		US-PATENT-CLASS-123-59E	c35	N77-32456	NASA-CASE-GSC-12143-1
		US-PATENT-CLASS-123-119A			US-PATENT-APPL-SN-743249
		US-PATENT-CLASS-123-122AB			US-PATENT-CLASS-73-421.5H
		US-PATENT-4,041,910			US-PATENT-CLASS-250-288
c37	N77-31501	NASA-CASE-NPO-14014-1			US-PATENT-4,046,012
		US-PATENT-APPL-SN-826204	c35	N77-32461	NASA-CASE-LEW-12661-1
c43	N77-31583	NASA-CASE-HSC-16253-1			US-PATENT-APPL-SN-837796
		US-PATENT-APPL-SN-831631	c36	N77-32478	NASA-CASE-LEW-12164-1
c44	N77-31601	NASA-CASE-LEW-12587-1			US-PATENT-APPL-SN-511334
		US-PATENT-APPL-SN-717319			US-PATENT-CLASS-350-162SF
		US-PATENT-CLASS-52-173			US-PATENT-4,043,674
		US-PATENT-CLASS-52-518	c37	N77-32499	NASA-CASE-HSC-19535-1
		US-PATENT-CLASS-136-89-1C			US-PATENT-APPL-SN-641784
		US-PATENT-CLASS-136-89P			US-PATENT-CLASS-292-110
		US-PATENT-4,040,867			US-PATENT-4,045,063
c44	N77-31610	NASA-CASE-MFS-23518-1	c37	N77-32500	NASA-CASE-LEW-12527-1
		US-PATENT-APPL-SN-829390			US-PATENT-APPL-SN-595747
c44	N77-31611	NASA-CASE-MFS-23518-2			US-PATENT-CLASS-290-52
		US-PATENT-APPL-SN-830382			US-PATENT-CLASS-308-72
c45	N77-31668	NASA-CASE-HSC-16299-1			US-PATENT-CLASS-308-195
		US-PATENT-APPL-SN-826203			US-PATENT-4,046,434
c54	N77-31787	NASA-CASE-LAR-12149-1	c37	N77-32501	NASA-CASE-LEW-12477-1
		US-PATENT-APPL-SN-829314			US-PATENT-APPL-SN-595745
c60	N77-31800	NASA-CASE-GSC-12111-2			US-PATENT-CLASS-290-52
		US-PATENT-APPL-SN-830272			US-PATENT-CLASS-308-195
c07	N77-32148	NASA-CASE-LEW-12312-1			US-PATENT-4,046,435
		US-PATENT-APPL-SN-654787	c44	N77-32580	NASA-CASE-NPO-13675-1
		US-PATENT-CLASS-416-135			US-PATENT-APPL-SN-658132
		US-PATENT-CLASS-416-190			US-PATENT-CLASS-204-157.1E
		US-PATENT-CLASS-416-193A			US-PATENT-CLASS-250-527
		US-PATENT-CLASS-416-241A			US-PATENT-4,045,315
		US-PATENT-4,045,149	c44	N77-32581	NASA-CASE-NPO-13510-1
c23	N77-32244	NASA-CASE-LEW-12053-2			US-PATENT-APPL-SN-536786
		US-PATENT-APPL-SN-796263			US-PATENT-CLASS-62-4
c24	N77-32249	NASA-CASE-LEW-11930-3			US-PATENT-CLASS-126-263
		US-PATENT-APPL-SN-764245			US-PATENT-CLASS-165-2
c25	N77-32255	NASA-CASE-NPO-13566-1			US-PATENT-CLASS-165-107
		US-PATENT-APPL-SN-653316			US-PATENT-4,044,821
		US-PATENT-CLASS-204-DIG. 11	c44	N77-32582	NASA-CASE-NPO-13810-1
		US-PATENT-CLASS-204-157.1E			US-PATENT-APPL-SN-681096
		US-PATENT-CLASS-204-158R			US-PATENT-CLASS-52-117
		US-PATENT-CLASS-204-162R			US-PATENT-CLASS-60-641
		US-PATENT-CLASS-250-527			US-PATENT-CLASS-126-270
		US-PATENT-4,045,359			US-PATENT-CLASS-126-271
c26	N77-32279	NASA-CASE-LEW-12906-1			US-PATENT-4,044,753
		US-PATENT-APPL-SN-691936	c44	N77-32583	NASA-CASE-NPO-13736-1
		US-PATENT-CLASS-75-170			US-PATENT-APPL-SN-681017
		US-PATENT-CLASS-148-32			US-PATENT-CLASS-52-2
		US-PATENT-4,045,255			US-PATENT-CLASS-350-295
c26	N77-32280	NASA-CASE-LEW-12270-1			US-PATENT-CLASS-350-320
		US-PATENT-APPL-SN-645507			US-PATENT-CLASS-427-47
		US-PATENT-CLASS-75-170			US-PATENT-CLASS-427-130
		US-PATENT-CLASS-148-32.5			US-PATENT-4,046,462
		US-PATENT-4,046,560	c44	N77-32595	NASA-CASE-LEW-12038-2
c27	N77-32308	NASA-CASE-GSC-12110-1			US-PATENT-APPL-SN-744576
		US-PATENT-APPL-SN-682435	c54	N77-32721	NASA-CASE-ARC-10756-1
		US-PATENT-CLASS-156-645			US-PATENT-APPL-SN-436313
		US-PATENT-CLASS-156-663			US-PATENT-CLASS-2-2.1A
		US-PATENT-4,046,619			US-PATENT-CLASS-214-1BC
c27	N77-32313	NASA-CASE-NPO-14021-1			US-PATENT-CLASS-214-1CM

ACCESSION NUMBER INDEX

c54 N77-32722	.....	US-PATENT-4,046,262
		NASA-CASE-MSC-14771-1
		US-PATENT-APPL-SN-688854
		US-PATENT-CLASS-55-179
		US-PATENT-CLASS-55-269
		US-PATENT-CLASS-165-166
		US-PATENT-4,046,529
c54 N77-32723	.....	NASA-CASE-NPO-13906-1
		US-PATENT-APPL-SN-837259
c60 N77-32731	.....	NASA-CASE-GSC-11839-3
		US-PATENT-APPL-SN-468614
		US-PATENT-APPL-SN-657997
		US-PATENT-CLASS-250-199
		US-PATENT-CLASS-340-347AD
		US-PATENT-CLASS-350-96B
		US-PATENT-3,996,455
		US-PATENT-4,045,792
c76 N77-32915	.....	NASA-CASE-HFS-23001-1
		US-PATENT-APPL-SN-610801
		US-PATENT-CLASS-156-DIG.62
		US-PATENT-CLASS-156-601
		US-PATENT-CLASS-156-619
		US-PATENT-CLASS-156-620
		US-PATENT-4,046,617

1. Report No NASA SP-7039 (12)		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle NASA PATENT ABSTRACTS BIBLIOGRAPHY A Continuing Bibliography (Supplement 12)				5. Report Date January 1978	
				6. Performing Organization Code	
7. Author(s)				8. Performing Organization Report No.	
9. Performing Organization Name and Address National Aeronautics and Space Administration Washington, DC 20546				10. Work Unit No.	
				11. Contract or Grant No.	
12. Sponsoring Agency Name and Address				13. Type of Report and Period Covered	
				14. Sponsoring Agency Code	
15. Supplementary Notes Section 2 - Indexes					
16. Abstract <p>This bibliography is issued in two sections: Section 1 - Abstracts, and Section 2 - Indexes. This issue of the Abstract Section cites 1091 patents and applications for patent introduced into the NASA scientific and technical information system during the period January 1974 through December 1977. Each entry in the Abstract Section consists of a citation, an abstract, and in most cases, a key illustration selected from the patent or application for patent. This issue of the Index Section contains entries for 3292 patent and application for patent citations covering the period May 1969 through December 1977. The Index Section contains five indexes -- subject, inventor, source, number, and accession number.</p>					
17. Key Words (Suggested by Author(s)) Bibliographies Inventions NASA Programs Patents				18. Distribution Statement Unclassified - Unlimited	
19. Security Classif (of this report) Unclassified		20. Security Classif (of this page) Unclassified		21. No of Pages 572	
				22. Price* \$10.50 HC	

* For sale by the National Technical Information Service, Springfield, Virginia 22161

PUBLIC COLLECTIONS OF NASA DOCUMENTS

DOMESTIC

NASA distributes its technical documents and bibliographic tools to eleven special libraries located in the organizations listed below. Each library is prepared to furnish the public such services as reference assistance, interlibrary loans, photocopy service, and assistance in obtaining copies of NASA documents for retention.

CALIFORNIA

University of California, Berkeley

COLORADO

University of Colorado, Boulder

DISTRICT OF COLUMBIA

Library of Congress

GEORGIA

Georgia Institute of Technology, Atlanta

ILLINOIS

The John Crerar Library, Chicago

MASSACHUSETTS

Massachusetts Institute of Technology, Cambridge

MISSOURI

Linda Hall Library, Kansas City

NEW YORK

Columbia University, New York

OKLAHOMA

University of Oklahoma, Bizzell Library

PENNSYLVANIA

Carnegie Library of Pittsburgh

WASHINGTON

University of Washington, Seattle

NASA publications (those indicated by an "*" following the accession number) are also received by the following public and free libraries:

CALIFORNIA

Los Angeles Public Library

San Diego Public Library

COLORADO

Denver Public Library

CONNECTICUT

Hartford Public Library

MARYLAND

Enoch Pratt Free Library, Baltimore

MASSACHUSETTS

Boston Public Library

MICHIGAN

Detroit Public Library

MINNESOTA

Minneapolis Public Library

MISSOURI

Kansas City Public Library

St. Louis Public Library

NEW JERSEY

Trenton Public Library

NEW YORK

Brooklyn Public Library

Buffalo and Erie County Public Library

Rochester Public Library

New York Public Library

OHIO

Akron Public Library

Cincinnati Public Library

Cleveland Public Library

Dayton Public Library

Toledo Public Library

TENNESSEE

Memphis Public Library

TEXAS

Dallas Public Library

Fort Worth Public Library

WASHINGTON

Seattle Public Library

WISCONSIN

Milwaukee Public Library

An extensive collection of NASA and NASA-sponsored documents and aerospace publications available to the public for reference purposes is maintained by the American Institute of Aeronautics and Astronautics, Technical Information Service, 750 Third Avenue, New York, New York 10017.

EUROPEAN

An extensive collection of NASA and NASA-sponsored publications is maintained by the British Library Lending Division, Boston Spa, Wetherby, Yorkshire, England. By virtue of arrangements other than with NASA, the British Library Lending Division also has available many of the non-NASA publications cited in *STAR*. European requesters may purchase facsimile copy of microfiche of NASA and NASA-sponsored documents, those identified by both the symbols "*" and "#", from ESA - Space Documentation Service, European Space Agency, 8-10 rue Mario-Nikis, 75738 Paris CEDEX 15, France.

National Aeronautics and
Space Administration

Washington, D.C.
20546

Official Business

Penalty for Private Use, \$300

SPECIAL FOURTH CLASS MAIL
BOOK

Postage and Fees Paid
National Aeronautics and
Space Administration
NASA-451



POSTMASTER

If Undeliverable (Section 158
Postal Manual) Do Not Return

NASA CONTINUING BIBLIOGRAPHY SERIES

NUMBER	TITLE	FREQUENCY
NASA SP-7011	AEROSPACE MEDICINE AND BIOLOGY Aviation medicine, space medicine, and space biology	Monthly
NASA SP-7037	AERONAUTICAL ENGINEERING Engineering, design, and operation of aircraft and aircraft components	Monthly
NASA SP-7039	NASA PATENT ABSTRACTS BIBLIOGRAPHY NASA patents and applications for patent	Semiannually
NASA SP-7041	EARTH RESOURCES Remote sensing of earth resources by aircraft and spacecraft	Quarterly
NASA SP-7043	ENERGY Energy sources, solar energy, energy conversion, transport, and storage	Quarterly
NASA SP-7500	MANAGEMENT Program, contract, and personnel management, and management techniques	Annually

Details on the availability of these publications may be obtained from

SCIENTIFIC AND TECHNICAL INFORMATION OFFICE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Washington, D.C. 20546